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(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

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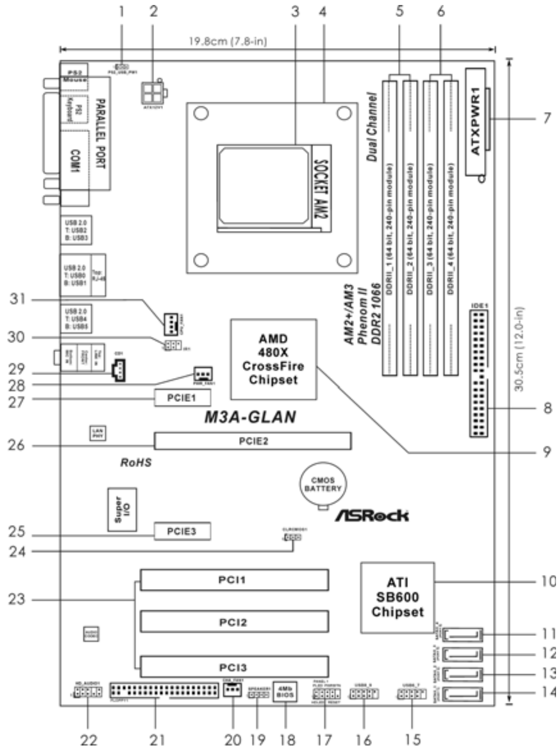
The Lithium battery adopted on this motherboard contains Perchlorate, a toxic substance controlled in Perchlorate Best Management Practices (BMP) regulations passed by the California Legislature. When you discard the Lithium battery in California, USA, please follow the related regulations in advance.
"Perchlorate Material-special handling may apply, see www.dtsc.ca.gov/hazardouswaste/perchlorate"

ASRock Website: http://www.asrock.com

Published May 2009

English

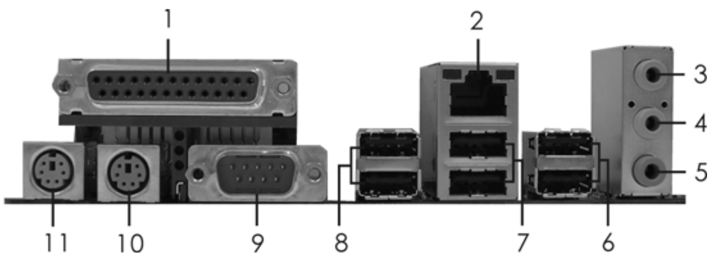
Motherboard Layout



1	PS2_USB_PW1 Jumper	17	System Panel Header (PANEL1, Orange)
2	ATX 12V Power Connector (ATX12V1)	18	SPI Flash Memory (4Mb)
3	AM2 940-Pin CPU Socket	19	Chassis Speaker Header (SPEAKER 1, Purple)
4	CPU Heatsink Retention Module	20	Chassis Fan Connector (CHA_FAN1)
5	2 x 240-pin DDR2 DIMM Slots (Dual Channel A: DDRII_1, DDRII_2; Yellow)	21	Floppy Connector (FLOPPY1)
6	2 x 240-pin DDR2 DIMM Slots (Dual Channel B: DDRII_3, DDRII_4; Orange)	22	Front Panel Audio Header (HD_AUDIO1, Lime)
7	ATX Power Connector (ATXPWR1)	23	PCI Slots (PCI1- 3)
8	Primary IDE Connector (IDE1, Blue)	24	Clear CMOS Jumper (CLRCMOS1)
9	Northbridge Controller	25	PCI Express x1 Slot (PCIE3)
10	Southbridge Controller	26	PCI Express x16 Slot (PCIE2)
11	Fourth SATAII Connector (SATAII_4 (PORT4))	27	PCI Express x1 Slot (PCIE1)
12	Third SATAII Connector (SATAII_3 (PORT3))	28	Power Fan Connector (PWR_FAN1)
13	Secondary SATAII Connector (SATAII_2 (PORT2))	29	Internal Audio Connector: CD1 (Black)
14	Primary SATAII Connector (SATAII_1 (PORT1))	30	Infrared Module Header (IR1)
15	USB 2.0 Header (USB6_7, Blue)	31	CPU Fan Connector (CPU_FAN1)
16	USB 2.0 Header (USB8_9, Blue)		

English

I/O Panel



1	**Parallel Port**		7	**USB 2.0 Ports (USB01)**
* 2	**LAN RJ-45 Port**		8	**USB 2.0 Ports (USB23)**
3	**Line In (Light Blue)**		9	**Serial Port: COM1**
4	**Line Out (Lime)**		10	**PS/2 Keyboard Port (Purple)**
5	**Microphone (Pink)**		11	**PS/2 Mouse Port (Green)**
6	**USB 2.0 Ports (USB45)**			

* There are two LED next to the LAN port. Please refer to the table below for the LAN port LED indications.

LAN Port LED Indications

Activity/Link LED

Status	Description
Off	No Activity
Blinking	Data Activity

SPEED LED

Status	Description
Off	10Mbps connection
Orange	100Mbps connection
Green	1Gbps connection



LAN Port

* To enable Multi-Streaming function, you need to connect a front panel audio cable to the front panel audio header. Please refer to below steps for the software setting of Multi-Streaming.

For Windows® XP:

After restarting your computer, you will find "Mixer" tool on your system. Please select "Mixer ToolBox"  , click "Enable playback multi-streaming", and click "ok". Choose "2CH" or "4CH" and then you are allowed to select "Realtek HDA Primary output" to use Rear Speaker and Front Speaker, or select "Realtek HDA Audio 2nd output" to use front panel audio. Then reboot your system.

For Windows® Vista™:

After restarting your computer, please double-click "Realtek HD Audio Manager" on the system tray. Set "Speaker Configuration" to "Quadraphonic" or "Stereo". Click "Device advanced settings", choose "Make front and rear output devices playbacks two different audio streams simultaneously", and click "ok". Then reboot your system.

1. Introduction

Thank you for purchasing ASRock ***M3A-GLAN*** motherboard, a reliable motherboard produced under ASRock's consistently stringent quality control. It delivers excellent performance with robust design conforming to ASRock's commitment to quality and endurance.

In this manual, chapter 1 and 2 contain introduction of the motherboard and step-by-step guide to the hardware installation. Chapter 3 and 4 contain the configuration guide to BIOS setup and information of the Support CD.

> Because the motherboard specifications and the BIOS software might be updated, the content of this manual will be subject to change without notice. In case any modifications of this manual occur, the updated version will be available on ASRock website without further notice. You may find the latest VGA cards and CPU support lists on ASRock website as well. ASRock website http://www.asrock.com
> If you require technical support related to this motherboard, please visit our website for specific information about the model you are using.
> www.asrock.com/support/index.asp

1.1 Package Contents

1 x ASRock ***M3A-GLAN*** Motherboard
(ATX Form Factor: 12.0-in x 7.8-in, 30.5 cm x 19.8 cm)
1 x ASRock ***M3A-GLAN*** Quick Installation Guide
1 x ASRock ***M3A-GLAN*** Support CD
1 x Ultra ATA 66/100/133 IDE Ribbon Cable (80-conductor)
1 x Serial ATA (SATA) Data Cable (Optional)
1 x Serial ATA (SATA) HDD Power Cable (Optional)
1 x I/O Panel Shield

1.2 Specifications

Platform	- ATX Form Factor: 12.0-in x 7.8-in, 30.5 cm x 19.8 cm
CPU	- Support for Socket AM2+ / AM2 processors: AMD Phenom™ FX / Phenom / Athlon 64 FX / Athlon 64 X2 Dual-Core / Athlon X2 Dual-Core / Athlon 64 / Sempron processor - Support for AM3 processors: AMD Phenom™ II X4 / X3 / X2 and Athlon II X4 / X3 / X2 processors - AMD LIVE!™ Ready - Supports AMD's Cool 'n' Quiet™ Technology - FSB 1000 MHz (2.0 GT/s) - Supports Untied Overclocking Technology (see **CAUTION 1**) - Supports Hyper-Transport Technology
Chipset	- Northbridge: AMD 480X CrossFire™ Chipset - Southbridge: AMD SB600
Memory	- Dual Channel DDR2 Memory Technology (see **CAUTION 2**) - 4 x DDR2 DIMM slots - Support DDR2 1066/800/667/533 non-ECC, un-buffered memory (see **CAUTION 3**) - Max. capacity of system memory: 16GB (see **CAUTION 4**)
Expansion Slot	- 1 x PCI Express x16 slot - 2 x PCI Express x1 slots - 3 x PCI slots
Audio	- 5.1 CH Windows® Vista™ Premium Level HD Audio (ALC662 Audio Codec)
LAN	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111DL - Supports Wake-On-LAN
Rear Panel I/O	ASRock HD 6CH I/O - 1 x PS/2 Mouse Port - 1 x PS/2 Keyboard Port - 1 x Serial Port: COM1 - 1 x Parallel Port (ECP/EPP Support) - 6 x Ready-to-Use USB 2.0 Ports - 1 x RJ-45 LAN Port with LED (ACT/LINK LED and SPEED LED) - HD Audio Jack: Line in/Front Speaker/Microphone
Connector	- 4 x Serial ATAII 3.0Gb/s connectors, support RAID (RAID 0, RAID 1 and RAID 10), NCQ, AHCI and "Hot Plug" functions (see **CAUTION 5**) - 1 x ATA133 IDE connector (supports 2 x IDE devices) - 1 x Floppy connector

English

	- 1 x IR header - CPU/Chassis/Power FAN connector - 24 pin ATX power connector - 4 pin 12V power connector - CD in header - Front panel audio connector - 2 x USB 2.0 headers (support 4 USB 2.0 ports) (see **CAUTION 6**)
BIOS Feature	- 4Mb AMI BIOS - AMI Legal BIOS - Supports "Plug and Play" - ACPI 1.1 Compliance Wake Up Events - Supports jumperfree - SMBIOS 2.3.1 Support - CPU Voltage Multi-adjustment - Supports Smart BIOS
Support CD	- Drivers, Utilities, AntiVirus Software (Trial Version)
Unique Feature	- ASRock OC Tuner (see **CAUTION 7**) - Intelligent Energy Saver (see **CAUTION 8**) - Instant Boot - ASRock Instant Flash (see **CAUTION 9**) - Hybrid Booster: - CPU Frequency Stepless Control (see **CAUTION 10**) - ASRock U-COP (see **CAUTION 11**) - Boot Failure Guard (B.F.G.) - ASRock AM2 Boost: ASRock Patented Technology to boost memory performance up to 12.5% (see **CAUTION 12**)
Hardware Monitor	- CPU Temperature Sensing - Chassis Temperature Sensing - CPU/Chassis/Power Fan Tachometer - CPU Quiet Fan - Voltage Monitoring: +12V, +5V, +3.3V, Vcore
OS	- Microsoft® Windows® XP / XP Media Center / XP 64-bit / Vista™ / Vista™ 64-bit compliant
Certifications	- FCC, CE, Microsoft® WHQL Certificated

* For detailed product information, please visit our website: http://www.asrock.com

English

WARNING

Please realize that there is a certain risk involved with overclocking, including adjusting the setting in the BIOS, applying Untied Overclocking Technology, or using the third-party overclocking tools. Overclocking may affect your system stability, or even cause damage to the components and devices of your system. It should be done at your own risk and expense. We are not responsible for possible damage caused by overclocking.

CAUTION!

1. This motherboard supports Untied Overclocking Technology. Please read "Untied Overclocking Technology" on page 20 for details.
2. This motherboard supports Dual Channel Memory Technology. Before you implement Dual Channel Memory Technology, make sure to read the installation guide of memory modules on page 11 for proper installation.
3. Whether 1066MHz memory speed is supported depends on the AM2+ CPU you adopt. If you want to adopt DDR2 1066 memory module on this motherboard, please refer to the memory support list on our website for the compatible memory modules.
   ASRock website http://www.asrock.com
4. Due to the operating system limitation, the actual memory size may be less than 4GB for the reservation for system usage under Windows® XP and Windows® Vista™. For Windows® XP 64-bit and Windows® Vista™ 64-bit with 64-bit CPU, there is no such limitation.
5. Before installing SATAII hard disk to SATAII connector, please read the "SATAII Hard Disk Setup Guide" on page 22 of "User Manual" in the support CD to adjust your SATAII hard disk drive to SATAII mode. You can also connect SATA hard disk to SATAII connector directly.
6. Power Management for USB 2.0 works fine under Microsoft® Windows® Vista™ 64-bit / Vista™ / XP 64-bit / XP SP1 or SP2.
7. It is a user-friendly ASRock overclocking tool which allows you to surveil your system by hardware monitor function and overclock your hardware devices to get the best system performance under Windows® environment. Please visit our website for the operation procedures of ASRock OC Tuner. ASRock website: http://www.asrock.com
8. Featuring an advanced proprietary hardware and software design, Intelligent Energy Saver is a revolutionary technology that delivers unparalleled power savings. The voltage regulator can reduce the number of output phases to improve efficiency when the CPU cores are idle. In other words, it is able to provide exceptional power saving and improve power efficiency without sacrificing computing performance. To use Intelligent Energy Saver function, please enable Cool 'n' Quiet option in the BIOS setup in advance. Please visit our website for the operation procedures of Intelligent Energy Saver.
   ASRock website: http://www.asrock.com

9. ASRock Instant Flash is a BIOS flash utility embedded in Flash ROM. This convenient BIOS update tool allows you to update system BIOS without entering operating systems first like MS-DOS or Windows®. With this utility, you can press <F6> key during the POST or press <F2> key to BIOS setup menu to access ASRock Instant Flash. Just launch this tool and save the new BIOS file to your USB flash drive, floppy disk or hard drive, then you can update your BIOS only in a few clicks without preparing an additional floppy diskette or other complicated flash utility. Please be noted that the USB flash drive or hard drive must use FAT32/16/12 file system.
10. Although this motherboard offers stepless control, it is not recommended to perform over-clocking. Frequencies other than the recommended CPU bus frequencies may cause the instability of the system or damage the CPU.
11. While CPU overheat is detected, the system will automatically shutdown. Before you resume the system, please check if the CPU fan on the motherboard functions properly and unplug the power cord, then plug it back again. To improve heat dissipation, remember to spray thermal grease between the CPU and the heatsink when you install the PC system.
12. This motherboard supports ASRock AM2 Boost overclocking technology. If you enable this function in the BIOS setup, the memory performance will improve up to 12.5%, but the effect still depends on the AM2 CPU you adopt. Enabling this function will overclock the chipset/CPU reference clock. However, we can not guarantee the system stability for all CPU/DRAM configurations. If your system is unstable after AM2 Boost function is enabled, it may not be applicative to your system. You may choose to disable this function for keeping the stability of your system.

2. Installation

This is an ATX form factor (12.0-in x 7.8-in, 30.5 cm x 19.8 cm) motherboard. Before you install the motherboard, study the configuration of your chassis to ensure that the motherboard fits into it.

Pre-installation Precautions

Take note of the following precautions before you install motherboard components or change any motherboard settings.

> Before you install or remove any component, ensure that the power is switched off or the power cord is detached from the power supply. Failure to do so may cause severe damage to the motherboard, peripherals, and/or components.

1. Unplug the power cord from the wall socket before touching any component.
2. To avoid damaging the motherboard components due to static electricity, NEVER place your motherboard directly on the carpet or the like. Also remember to use a grounded wrist strap or touch a safety grounded object before you handle components.
3. Hold components by the edges and do not touch the ICs.
4. Whenever you uninstall any component, place it on a grounded anti-static pad or in the bag that comes with the component.
5. When placing screws into the screw holes to secure the motherboard to the chassis, please do not over-tighten the screws! Doing so may damage the motherboard.

2.1 CPU Installation

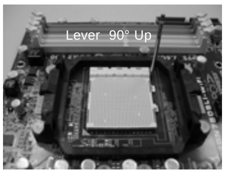
Step 1. Unlock the socket by lifting the lever up to a 90° angle.

Step 2. Position the CPU directly above the socket such that the CPU corner with the golden triangle matches the socket corner with a small triangle.

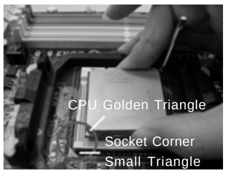
Step 3. Carefully insert the CPU into the socket until it fits in place.

> The CPU fits only in one correct orientation. DO NOT force the CPU into the socket to avoid bending of the pins.

Step 4. When the CPU is in place, press it firmly on the socket while you push down the socket lever to secure the CPU. The lever clicks on the side tab to indicate that it is locked.



STEP 1:
Lift Up The Socket Lever



STEP 2 / STEP 3:
Match The CPU Golden Triangle To The Socket Corner Small Triangle



STEP 4:
Push Down And Lock The Socket Lever

2.2 Installation of CPU Fan and Heatsink

> After you install the CPU into this motherboard, it is necessary to install a larger heatsink and cooling fan to dissipate heat. You also need to spray thermal grease between the CPU and the heatsink to improve heat dissipation. Make sure that the CPU and the heatsink are securely fastened and in good contact with each other. Then connect the CPU fan to the CPU FAN connector (CPU_FAN1, see Page 2, No. 31). For proper installation, please kindly refer to the instruction manuals of the CPU fan and the heatsink.

English

2.3 Installation of Memory Modules (DIMM)

This motherboard provides four 240-pin DDR2 (Double Data Rate 2) DIMM slots, and supports Dual Channel Memory Technology. For dual channel configuration, you always need to install **identical** (the same brand, speed, size and chip-type) DDR2 DIMM pair in the slots of the same color. In other words, you have to install **identical** DDR2 DIMM pair in **Dual Channel A** (DDRII_1 and DDRII_2; Yellow slots; see p.2 No.5) or **identical** DDR2 DIMM pair in **Dual Channel B** (DDRII_3 and DDRII_4; Orange slots; see p.2 No.6), so that Dual Channel Memory Technology can be activated. This motherboard also allows you to install four DDR2 DIMMs for dual channel configuration, and please install **identical** DDR2 DIMMs in all four slots. You may refer to the Dual Channel Memory Configuration Table below.

Dual Channel Memory Configurations

	DDRII_1 (Yellow Slot)	DDRII_2 (Yellow Slot)	DDRII_3 (Orange Slot)	DDRII_4 (Orange Slot)
(1)	Populated	Populated	-	-
(2)	-	-	Populated	Populated
(3)*	Populated	Populated	Populated	Populated

* For the configuration (3), please install **identical** DDR2 DIMMs in all four slots.

1. If you want to install two memory modules, for optimal compatibility and reliability, it is recommended to install them in the slots of the same color. In other words, install them either in the set of yellow slots (DDRII_1 and DDRII_2), or in the set of orange slots (DDRII_3 and DDRII_4).
2. If only one memory module or three memory modules are installed in the DDR2 DIMM slots on this motherboard, it is unable to activate the Dual Channel Memory Technology.
3. If a pair of memory modules is NOT installed in the same Dual Channel, for example, installing a pair of memory modules in DDRII_1 and DDRII_3, it is unable to activate the Dual Channel Memory Technology .
4. It is not allowed to install a DDR memory module into DDR2 slot; otherwise, this motherboard and DIMM may be damaged.
5. If you adopt DDR2 1066 memory modules on this motherboard, it is recommended to install them on DDRII_3 and DDRII_4 slots.

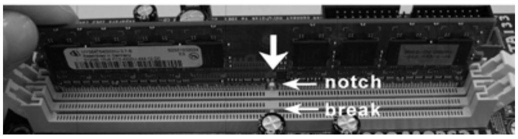
Installing a DIMM

Please make sure to disconnect power supply before adding or removing DIMMs or the system components.

Step 1. Unlock a DIMM slot by pressing the retaining clips outward.

Step 2. Align a DIMM on the slot such that the notch on the DIMM matches the break on the slot.

○



×



The DIMM only fits in one correct orientation. It will cause permanent damage to the motherboard and the DIMM if you force the DIMM into the slot at incorrect orientation.

Step 3. Firmly insert the DIMM into the slot until the retaining clips at both ends fully snap back in place and the DIMM is properly seated.

English

2.4 Expansion Slots (PCI and PCI Express Slots)

There are 3 PCI slots and 3 PCI Express slots on this motherboard.

PCI slots: PCI slots are used to install expansion cards that have the 32-bit PCI interface.

PCIE slots:

PCIE1 / PCIE3 (PCIE x1 slot) is used for PCI Express cards with x1 lane width cards, such as Gigabit LAN card, SATA2 card, etc.

PCIE2 (PCIE x16 slot) is used for PCI Express cards with x16 lane width graphics cards.

Installing an expansion card

Step 1. Before installing the expansion card, please make sure that the power supply is switched off or the power cord is unplugged. Please read the documentation of the expansion card and make necessary hardware settings for the card before you start the installation.

Step 2. Remove the system unit cover (if your motherboard is already installed in a chassis).

Step 3. Remove the bracket facing the slot that you intend to use. Keep the screws for later use.

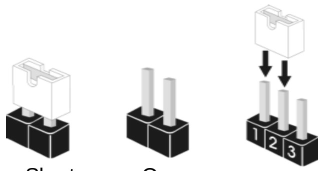
Step 4. Align the card connector with the slot and press firmly until the card is completely seated on the slot.

Step 5. Fasten the card to the chassis with screws.

Step 6. Replace the system cover.

2.5 Jumpers Setup

The illustration shows how jumpers are setup. When the jumper cap is placed on pins, the jumper is "Short". If no jumper cap is placed on pins, the jumper is "Open". The illustration shows a 3-pin jumper whose pin1 and pin2 are "Short" when jumper cap is placed on these 2 pins.



Short Open

Jumper	Setting	
PS2_USB_PW1 (see p.2, No. 1)		Short pin2, pin3 to enable +5VSB (standby) for PS/2 or USB wake up events.

Note: To select +5VSB, it requires 2 Amp and higher standby current provided by power supply.

Clear CMOS Jumper (CLRCMOS1) (see p.2, No. 24)	 Default Clear CMOS	

Note: CLRCMOS1 allows you to clear the data in CMOS. The data in CMOS includes system setup information such as system password, date, time, and system setup parameters. To clear and reset the system parameters to default setup, please turn off the computer and unplug the power cord from the power supply. After waiting for 15 seconds, use a jumper cap to short pin2 and pin3 on CLRCMOS1 for 5 seconds. However, please do not clear the CMOS right after you update the BIOS. If you need to clear the CMOS when you just finish updating the BIOS, you must boot up the system first, and then shut it down before you do the clear-CMOS action.

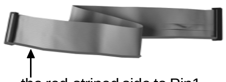
English

2.6 Onboard Headers and Connectors

> Onboard headers and connectors are NOT jumpers. Do NOT place jumper caps over these headers and connectors. Placing jumper caps over the headers and connectors will cause permanent damage of the motherboard!

Floppy Connector
(33-pin FLOPPY1)
(see p.2 No. 21)

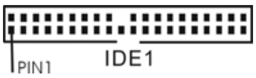




the red-striped side to Pin1

Note: Make sure the red-striped side of the cable is plugged into Pin1 side of the connector.

Primary IDE connector (Blue)
(39-pin IDE1, see p.2 No. 8)



connect the blue end to the motherboard

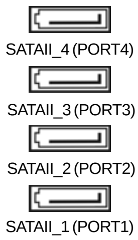


connect the black end to the IDE devices

80-conductor ATA 66/100/133 cable

Note: Please refer to the instruction of your IDE device vendor for the details.

Serial ATAII Connectors
(SATAII_1 (PORT1): see p.2, No. 14)
(SATAII_2 (PORT2): see p.2, No. 13)
(SATAII_3 (PORT3): see p.2, No. 12)
(SATAII_4 (PORT4): see p.2, No. 11)



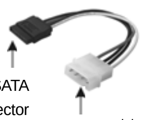
These four Serial ATAII (SATAII) connectors support SATAII or SATA hard disk for internal storage devices. The current SATAII interface allows up to 3.0 Gb/s data transfer rate.

Serial ATA (SATA) Data Cable
(Optional)



Either end of the SATA data cable can be connected to the SATA / SATAII hard disk or the SATAII connector on this motherboard.

Serial ATA (SATA) Power Cable
(Optional)



connect to the SATA HDD power connector

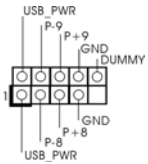
connect to the power supply

Please connect the black end of SATA power cable to the power connector on each drive. Then connect the white end of SATA power cable to the power connector of the power supply.

USB 2.0 Headers

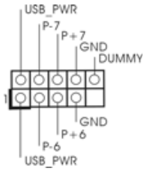
(9-pin USB8_9)

(see p.2 No. 16)



(9-pin USB6_7)

(see p.2 No. 15)

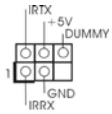


Besides six default USB 2.0 ports on the I/O panel, there are two USB 2.0 headers on this motherboard. Each USB 2.0 header can support two USB 2.0 ports.

Infrared Module Header

(5-pin IR1)

(see p.2 No. 30)

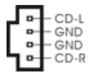


This header supports an optional wireless transmitting and receiving infrared module.

Internal Audio Connectors

(4-pin CD1)

(CD1: see p.2 No. 29)



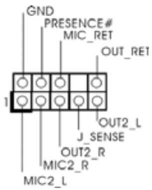
CD1

This connector allows you to receive stereo audio input from sound sources such as a CD-ROM, DVD-ROM, TV tuner card, or MPEG card.

Front Panel Audio Header

(9-pin HD_AUDIO1)

(see p.2, No. 22)



This is an interface for the front panel audio cable that allows convenient connection and control of audio devices.



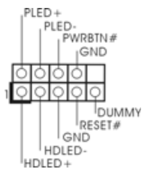
1. High Definition Audio supports Jack Sensing, but the panel wire on the chassis must support HDA to function correctly. Please follow the instruction in our manual and chassis manual to install your system.
2. If you use AC'97 audio panel, please install it to the front panel audio header as below:
   A. Connect Mic_IN (MIC) to MIC2_L.
   B. Connect Audio_R (RIN) to OUT2_R and Audio_L (LIN) to OUT2_L.
   C. Connect Ground (GND) to Ground (GND).
   D. MIC_RET and OUT_RET are for HD audio panel only. You don't need to connect them for AC'97 audio panel.
   E. Enter BIOS Setup Utility. Enter Advanced Settings, and then select Chipset Configuration. Set the Front Panel Control option from [Auto] to [Enabled].
   F. Enter Windows system. Click the icon on the lower right hand taskbar to enter Realtek HD Audio Manager.

English

For Windows® XP / XP 64-bit OS:
Click “Audio I/O”, select “Connector Settings”  , choose “Disable front panel jack detection”, and save the change by clicking “OK”.
For Windows® Vista™ / Vista™ 64-bit OS:
Click the right-top “Folder” icon  , choose “Disable front panel jack detection”, and save the change by clicking “OK”.

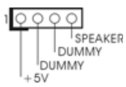
G. To activate the front mic.
For Windows® XP / XP 64-bit OS:
Please select “Front Mic” as default record device.
If you want to hear your voice through front mic, please deselect "Mute" icon in “Front Mic” of “Playback” portion.
For Windows® Vista™ / Vista™ 64-bit OS:
Go to the "Front Mic" Tab in the Realtek Control panel.
Click "Set Default Device" to make the Front Mic as the default record device.

System Panel Header
(9-pin PANEL1)
(see p.2 No. 17)



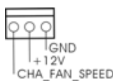
This header accommodates several system front panel functions.

Chassis Speaker Header
(4-pin SPEAKER 1)
(see p.2 No. 19)

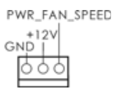


Please connect the chassis speaker to this header.

Chassis and Power Fan Connectors
(3-pin CHA_FAN1)
(see p.2 No. 20)

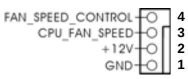


(3-pin PWR_FAN1)
(see p.2 No. 28)



Please connect the fan cables to the fan connectors and match the black wire to the ground pin.

CPU Fan Connector
(4-pin CPU_FAN1)
(see p.2 No. 31)



Please connect the CPU fan cable to this connector and match the black wire to the ground pin.

English

Though this motherboard provides 4-Pin CPU fan (Quiet Fan) support, the 3-Pin CPU fan still can work successfully even without the fan speed control function. If you plan to connect the 3-Pin CPU fan to the CPU fan connector on this motherboard, please connect it to Pin 1-3.

Pin 1-3 Connected



3-Pin Fan Installation

ATX Power Connector
(24-pin ATXPWR1)
(see p.2 No. 7)



Please connect an ATX power supply to this connector.

Though this motherboard provides 24-pin ATX power connector, it can still work if you adopt a traditional 20-pin ATX power supply. To use the 20-pin ATX power supply, please plug your power supply along with Pin 1 and Pin 13.



20-Pin ATX Power Supply Installation

ATX 12V Power Connector
(4-pin ATX12V1)
(see p.2 No. 2)



Please note that it is necessary to connect a power supply with ATX 12V plug to this connector. Failing to do so will cause power up failure.

2.7 Driver Installation Guide

To install the drivers to your system, please insert the support CD to your optical drive first. Then, the drivers compatible to your system can be auto-detected and listed on the support CD driver page. Please follow the order from up to bottom side to install those required drivers. Therefore, the drivers you install can work properly.

2.8 Installing Windows® XP / XP 64-bit / Vista™ / Vista™ 64-bit With RAID Functions

If you want to install Windows® XP / XP 64-bit / Vista™ / Vista™ 64-bit on your SATA / SATAII HDDs with RAID functions, please refer to the document at the following path in the Support CD for detailed procedures:

..\ RAID Installation Guide

2.9 Installing Windows® XP / XP 64-bit / Vista™ / Vista™ 64-bit Without RAID Functions

If you want to install Windows® XP, Windows® XP 64-bit, Windows® Vista™ or Windows® Vista™ 64-bit OS on your SATA / SATAII HDDs without RAID functions, please follow below procedures according to the OS you install.

2.9.1 Installing Windows® XP / XP 64-bit Without RAID Functions

If you want to install Windows® XP or Windows® XP 64-bit on your SATA / SATAII HDDs without RAID functions, please follow below steps.

NOTE1. If you install single or multiple SATA / SATAII HDDs on this motherboard and plan to install Windows® XP / XP 64-bit on SATA / SATAII HDDs, it is still suggested to use RAID mode even you don't plan to use RAID functions. Please refer to "User Manual" in the support CD for details.

NOTE2. AHCI mode is only recommended for Windows® Vista™ / Vista™ 64-bit users. If you install Windows® XP / XP 64-bit, it is not suggested to use AHCI mode.

Using SATA / SATAII HDDs without NCQ and Hot Plug functions

STEP 1: Set up BIOS.

A. Enter BIOS SETUP UTILITY → Advanced screen → IDE Configuration.

B. Set the "SATA Operation Mode" option to [IDE].

STEP 2: Install Windows® XP / Windows® XP 64-bit OS on your system.

2.9.2 Installing Windows® Vista™ / Vista™ 64-bit Without RAID Functions

If you want to install Windows® Vista™ or Windows® Vista™ 64-bit on your SATA / SATAII HDDs without RAID functions, please follow below steps.

Using SATA / SATAII HDDs without NCQ and Hot Plug functions

STEP 1: Set up BIOS.

A. Enter BIOS SETUP UTILITY → Advanced screen → IDE Configuration.

B. Set the "SATA Operation Mode" option to [IDE].

STEP 2: Install Windows® Vista™ / Vista™ 64-bit OS on your system.

Using SATA / SATAII HDDs with NCQ and Hot Plug functions

STEP 1: Set Up BIOS.

A. Enter BIOS SETUP UTILITY → Advanced screen → IDE Configuration.

B. Set the "SATA Operation Mode" option to [AHCI].

STEP 2: Install Windows® Vista™ / Vista™ 64-bit OS on your system.

Insert the Windows® Vista™ / Windows® Vista™ 64-bit optical disk into the optical drive to boot your system, and follow the instruction to install Windows® Vista™ / Windows® Vista™ 64-bit OS on your system. When you see "Where do you want to install Windows?" page, please insert the ASRock Support CD into your optical drive, and click the "Load Driver" button on the left on the bottom to load the ATI™ AHCI drivers. ATI™ AHCI drivers are in the following path in our Support CD:

.. \ I386 (For Windows® Vista™ OS)

.. \ AMD64 (For Windows® Vista™ 64-bit OS)

After that, please insert Windows® Vista™ / Windows® Vista™ 64-bit optical disk into the optical drive again to continue the installation.

2.10 Untied Overclocking Technology

This motherboard supports Untied Overclocking Technology, which means during overclocking, FSB enjoys better margin due to fixed PCI / PCIE buses. Before you enable Untied Overclocking function, please enter "Overclock Mode" option of BIOS setup to set the selection from [Auto] to [CPU, PCIE, Async.]. Therefore, CPU FSB is untied during overclocking, but PCI / PCIE buses are in the fixed mode so that FSB can operate under a more stable overclocking environment.

Please refer to the warning on page 7 for the possible overclocking risk before you apply Untied Overclocking Technology.

English

3. BIOS Information

The Flash Memory on the motherboard stores BIOS Setup Utility. When you start up the computer, please press <F2> during the Power-On-Self-Test (POST) to enter BIOS Setup utility; otherwise, POST continues with its test routines. If you wish to enter BIOS Setup after POST, please restart the system by pressing <Ctl> + <Alt> + <Delete>, or pressing the reset button on the system chassis. The BIOS Setup program is designed to be user-friendly. It is a menu-driven program, which allows you to scroll through its various sub-menus and to select among the predetermined choices. For the detailed information about BIOS Setup, please refer to the User Manual (PDF file) contained in the Support CD.

4. Software Support CD information

This motherboard supports various Microsoft® Windows® operating systems: XP / XP Media Center / XP 64-bit / Vista™ / Vista™ 64-bit. The Support CD that came with the motherboard contains necessary drivers and useful utilities that will enhance motherboard features. To begin using the Support CD, insert the CD into your CD-ROM drive. It will display the Main Menu automatically if "AUTORUN" is enabled in your computer. If the Main Menu does not appear automatically, locate and double-click on the file "ASSETUP.EXE" from the "BIN" folder in the Support CD to display the menus.

English

1. Einführung

Wir danken Ihnen für den Kauf des ASRock ***M3A-GLAN*** Motherboard, ein zuverlässiges Produkt, welches unter den ständigen, strengen Qualitätskontrollen von ASRock gefertigt wurde. Es bietet Ihnen exzellente Leistung und robustes Design, gemäß der Verpflichtung von ASRock zu Qualität und Halbarkeit.
Diese Schnellinstallationsanleitung führt in das Motherboard und die schrittweise Installation ein. Details über das Motherboard finden Sie in der Bedienungsanleitung auf der Support-CD.

Da sich Motherboard-Spezifikationen und BIOS-Software verändern können, kann der Inhalt dieses Handbuches ebenfalls jederzeit geändert werden. Für den Fall, dass sich Änderungen an diesem Handbuch ergeben, wird eine neue Version auf der ASRock-Website, ohne weitere Ankündigung, verfügbar sein. Die neuesten Grafikkarten und unterstützten CPUs sind auch auf der ASRock-Website aufgelistet.
ASRock-Website: http://www.asrock.com
Wenn Sie technische Unterstützung zu Ihrem Motherboard oder spezifische Informationen zu Ihrem Modell benötigen, besuchen Sie bitte unsere Webseite:
www.asrock.com/support/index.asp

1.1 Kartoninhalt

ASRock ***M3A-GLAN*** Motherboard
(ATX-Formfaktor: 30.5 cm x 19.8 cm; 12.0 Zoll x 7.8 Zoll)
ASRock ***M3A-GLAN*** Schnellinstallationsanleitung
ASRock ***M3A-GLAN*** Support-CD
Ein 80-adriges Ultra-ATA 66/100/133 IDE-Flachbandkabel
Ein Seriell-ATA- (SATA) Datenkabel (Option)
Ein Seriell-ATA (SATA) Festplattennetzkabel (Option)
Ein I/O Shield

Deutsch

1.2 Spezifikationen

Plattform	- ATX-Formfaktor: 30.5 cm x 19.8 cm; 12.0 Zoll x 7.8 Zoll
CPU	- Unterstützung für Socket AM2+ / AM2-Prozessoren: AMD Phenom™ FX / Phenom / Athlon 64 FX / Athlon 64 X2 Dualkern / Athlon X2 Dualkern / Athlon 64 / Sempron-Prozessor - Unterstützung von AM3-Prozessoren: AMD Phenom™ II X4 / X3 / X2 und Athlon X4 / X3 / X2-Prozessor - AMD LIVE!™-bereit - Unterstützt Cool 'n' Quiet™-Technologie von AMD - FSB 1000 MHz (2.0 GT/s) - Unterstützt Untied-Übertaktungstechnologie (siehe **VORSICHT 1**) - Unterstützt Hyper-Transport- Technologie
Chipsatz	- Northbridge: AMD 480X CrossFire™ - Southbridge: AMD SB600
Speicher	- Unterstützung von Dual-Kanal-Speichertechnologie (siehe **VORSICHT 2**) - 4 x Steckplätze für DDR2 - Unterstützt DDR2 1066/800/667/533 non-ECC, ungepufferter Speicher (siehe **VORSICHT 3**) - Max. Kapazität des Systemspeichers: 16GB (siehe **VORSICHT 4**)
Erweiterungs-steckplätze	- 1 x PCI Express x16-Steckplatz - 2 x PCI Express x1-Steckplatz - 3 x PCI -Steckplätze
Audio	- 5.1 CH Windows® Vista™ Premium Level HD Audio (ALC662 Audio Codec)
LAN	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111DL - Unterstützt Wake-On-LAN
E/A-Anschlüsse an der Rückseite	ASRock HD 6CH I/O - 1 x PS/2-Mausanschluss - 1 x PS/2-Tastaturanschluss - 1 x Serieller port: COM1 - 1 x Parallel Port (ECP/EPP Support) - 6 x Standard-USB 2.0-Anschlüsse - 1 x RJ-45 LAN Port mit LED (ACT/LINK LED und SPEED LED) - HD Audiobuchse: Audioeingang / Lautsprecher vorne / Mikrofon

Deutsch

Anschlüsse	- 4 x SATAII-Anschlüsse, unterstützt bis 3.0 Gb/s Datenübertragungsrate, unterstützt RAID (RAID 0, RAID 1 und RAID 10), NCQ, AHCI und “Hot Plug” Funktionen (siehe **VORSICHT 5**) - 1 x ATA133 IDE-Anschlüsse (Unterstützt bis 2 IDE-Geräte) - 1 x FDD-Anschlüsse - 1 x Infrarot-Modul-Header - CPU/Gehäuse/Stromlüfter-Anschluss - 24-pin ATX-Netz-Header - 4-pin anschluss für 12V-ATX-Netzteil - Interne Audio-Anschlüsse - Anschluss für Audio auf der Gehäusevorderseite - 2 x USB 2.0-Anschlüsse (Unterstützung 4 zusätzlicher USB 2.0-Anschlüsse) (siehe **VORSICHT 6**)
BIOS	- 4Mb AMI BIOS - AMI legal BIOS mit Unterstützung für “Plug and Play” - ACPI 1.1-Weckfunktionen - JumperFree-Modus - SMBIOS 2.3.1 - Zentraleinheit Stromspannung Multianpassung - Unterstützt Smart BIOS
Support-CD	- Treiber, Dienstprogramme, Antivirussoftware (Probeversion)
Einzigartige Eigenschaft	- ASRock OC Tuner (siehe **VORSICHT 7**) - Intelligent Energy Saver (Intelligente Energiesparfunktion) (siehe **VORSICHT 8**) - Sofortstart - ASRock Instant Flash (siehe **VORSICHT 9**) - Hybrid Booster: - Schrittloser CPU-Frequenz-Kontrolle (siehe **VORSICHT 10**) - ASRock U-COP (siehe **VORSICHT 11**) - Boot Failure Guard (B.F.G. – Systemstartfehlerschutz) - ASRock AM2 Boost: ASRocks patentgeschützte Technologie zur Erhöhung der Arbeitsspeicherleistung um bis zu 12,5% (siehe **VORSICHT 12**)
Hardware Monitor	- CPU-Temperatursensor - Motherboardtemperaturerkennung - Drehzahlmessung für CPU/Gehäuse/Stromlüfter - CPU-Lüftergeräuschdämpfung - Spannungsüberwachung: +12V, +5V, +3.3V, Vcore

Deutsch

Betriebssysteme	- Unterstützt Microsoft® Windows® XP / XP Media Center / XP 64-Bit / Vista™ / Vista™ 64-Bit
Zertifizierungen	- FCC, CE, WHQL

* Für die ausführliche Produktinformation, besuchen Sie bitte unsere Website: http://www.asrock.com

WARNUNG

Beachten Sie bitte, dass Overclocking, einschließlich der Einstellung im BIOS, Anwenden der Untied Overclocking-Technologie oder Verwenden von Overclocking-Werkzeugen von Dritten, mit einem gewissen Risiko behaftet ist. Overclocking kann sich nachteilig auf die Stabilität Ihres Systems auswirken oder sogar Komponenten und Geräte Ihres Systems beschädigen. Es geschieht dann auf eigene Gefahr und auf Ihre Kosten. Wir übernehmen keine Verantwortung für mögliche Schäden, die aufgrund von Overclocking verursacht wurden.

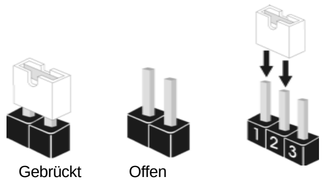
VORSICHT!

1. Dieses Motherboard unterstützt die Untied-Übertaktungstechnologie. Unter “Entkoppelte Übertaktungstechnologie” auf Seite 20 finden Sie detaillierte Informationen.
2. Dieses Motherboard unterstützt Dual-Kanal-Speichertechnologie. Vor Implementierung der Dual-Kanal-Speichertechnologie müssen Sie die Installationsanleitung für die Speichermodule auf Seite 11 zwecks richtiger Installation gelesen haben.
3. Ob die Speichergeschwindigkeit 1066 MHz unterstützt wird, hängt von der von Ihnen eingesetzten AM2+-CPU ab. Schauen Sie bitte auf unseren Internetseiten in der Liste mit unterstützten Speichermodulen nach, wenn Sie DDR2 1066-Speichermodule einsetzen möchten.
   ASRock-Internetseite: http://www.asrock.com
4. Durch Betriebssystem-Einschränkungen kann die tatsächliche Speichergröße weniger als 4 GB betragen, da unter Windows® XP und Windows® Vista™ etwas Speicher zur Nutzung durch das System reserviert wird. Unter Windows® XP 64-bit und Windows® Vista™ 64-bit mit 64-Bit-CPU besteht diese Einschränkung nicht.
5. Vor Installation der SATAII-Festplatte an den SATAII-Anschluss lesen Sie bitte “Setup-Anleitung für SATAII-Festplatte” auf Seite 22 der “Bedienungsanleitung” auf der Support-CD, um Ihre SATAII-Festplatte dem SATAII-Modus anzugleichen. Sie können die SATA-Festplatte auch direkt mit dem SATAII-Anschluss verbinden.
6. Das Power Management für USB 2.0 arbeitet unter Microsoft® Windows® Vista™ 64-Bit / Vista™ / XP 64-Bit / XP SP1 oder SP2 einwandfrei.
7. Es ist ein benutzerfreundlicher ASRock Übertaktenswerkzeug, das erlaubt, dass Sie Ihr System durch den Hardware-Monitor Funktion zu überblicken und Ihre Hardware-Geräte übertakten, um die beste Systemleistung unter der Windows® Umgebung zu erreichen. Besuchen Sie bitte unsere Website für die Operationsverfahren von ASRock OC Tuner. ASRock-Website: http://www.asrock.com

8. Mit einer eigenen, modernen Hardware und speziellem Softwaredesign, bietet der Intelligent Energy Saver eine revolutionäre Technologie zur bisher unerreichten Energieeinsparung. Ein Spannungsregler kann die Anzahl von Ausgangsphasen zur Effektivitätsverbessserung reduzieren, wenn sich die CPU im Leerlauf befindet. Mit anderen Worten: Sie genießen außergewöhnliche Energieeinsparung und verbesserten Wirkungsgrad ohne Leistungseinschränkungen. Wenn Sie die Intelligent Energy Saver-Funktion nutzen möchten, aktivieren Sie zuvor die „Cool 'n' Quiet"-Option im BIOS. Weitere Bedienungshinweise zum Intelligent Energy Saver finden Sie auf unseren Internetseiten.
   ASRock-Internetseite: http://www.asrock.com
9. ASRock Instant Flash ist ein im Flash-ROM eingebettetes BIOS-Flash-Programm. Mithilfe dieses praktischen BIOS-Aktualisierungswerkzeugs können Sie das System-BIOS aktualisieren, ohne dafür zuerst Betriebssysteme wie MS-DOS oder Windows® aufrufen zu müssen. Mit diesem Programm bekommen Sie durch Drücken der <F6>-Taste während des POST-Vorgangs oder durch Drücken der <F2>-Taste im BIOS-Setup-Menü Zugang zu ASRock Instant Flash. Sie brauchen dieses Werkzeug einfach nur zu starten und die neue BIOS-Datei auf Ihrem USB-Flash-Laufwerk, Diskettenlaufwerk oder der Festplatte zu speichern, und schon können Sie Ihr BIOS mit nur wenigen Klickvorgängen ohne Bereitstellung einer zusätzlichen Diskette oder eines anderen komplizierten Flash-Programms aktualisieren. Achten Sie darauf, dass das USB-Flash-Laufwerk oder die Festplatte das Dateisystem FAT32/16/12 benutzen muss.
10. Obwohl dieses Motherboard stufenlose Steuerung bietet, wird Overclocking nicht empfohlen. Frequenzen, die von den empfohlenen CPU-Busfrequenzen abweichen, können Instabilität des Systems verursachen oder die CPU beschädigen.
11. Wird eine Überhitzung der CPU registriert, führt das System einen automatischen Shutdown durch. Bevor Sie das System neu starten, prüfen Sie bitte, ob der CPU-Lüfter am Motherboard richtig funktioniert, und stecken Sie bitte den Stromkabelstecker aus und dann wieder ein. Um die Wärmeableitung zu verbessern, bitte nicht vergessen, etwas Wärmeleitpaste zwischen CPU und Kühlkörper zu sprühen.
12. Dieses Motherboard unterstützt die ASRock AM2 Boost Übertaktungstechnologie. Wenn Sie diese Funktion im BIOS-Setup aktivieren, wird die Arbeitsspeicherleistung um bis zu 12,5% gesteigert. Die Wirkung hängt aber von der verwendeten AM2 CPU ab. Diese Funktion übertaktet die Standardfrequenz des Chipsatz und der CPU. Dennoch gewähren wir die Systemstabilität nicht bei allen CPU/DRAM-Konfigurationen. Wird Ihr System nach dem Aktivieren der AM2 Boost-Funktion unstabil, dann ist diese Funktion wahrscheinlich nicht für Ihr System geeignet. Sie können diese Funktion deaktivieren, um die Stabilität Ihres System zu bewahren.

1.3 Einstellung der Jumper

Die Abbildung verdeutlicht, wie Jumper gesetzt werden. Werden Pins durch Jumperkappen verdeckt, ist der Jumper “gebrückt”. Werden keine Pins durch Jumperkappen verdeckt, ist der Jumper “offen”. Die Abbildung zeigt einen 3-Pin Jumper dessen Pin1 und Pin2 “gebrückt” sind, bzw. es befindet sich eine Jumper-Kappe auf diesen beiden Pins.



Gebrückt Offen

Jumper	Einstellun		
PS2_USB_PW1 (siehe S.2, No. 1)	1_2  +5V	2_3  +5VSB	Überbrücken Sie Pin2, Pin3, um +5VSB (Standby) zu setzen und die PS/2 oder USB-Weckfunktionen zu aktivieren.

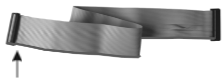
Hinweis: Um +5VSB nutzen zu können, muss das Netzteil auf dieser Leitung 2A oder mehr leisten können.

CMOS löschen (CLRCMOS1, 3-Pin jumper) (siehe S.2, No. 24)	1_2  Default-Einstellung	2_3  CMOS löschen

Hinweis: CLRCMOS1 erlaubt Ihnen das Löschen der CMOS-Daten. Diese beinhalten das System-Passwort, Datum, Zeit und die verschiedenen BIOS-Parameter. Um die Systemparameter zu löschen und auf die Werkseinstellung zurückzusetzen, schalten Sie bitte den Computer ab und entfernen das Stromkabel. Benutzen Sie eine Jumperkappe, um die Pin 2 und Pin 3 an CLRCMOS1 für 5 Sekunden kurzzuschließen. Bitte vergessen Sie nicht, den Jumper wieder zu entfernen, nachdem das CMOS gelöscht wurde. Bitte vergessen Sie nicht, den Jumper wieder zu entfernen, nachdem das CMOS gelöscht wurde. Wenn Sie den CMOS-Inhalt gleich nach dem Aktualisieren des BIOS löschen müssen, müssen Sie zuerst das System starten und dann wieder ausschalten, bevor Sie den CMOS-Inhalt löschen.

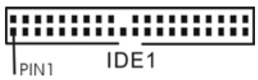
1.4 Anschlüsse

Anschlussleisten sind KEINE Jumper. Setzen Sie KEINE Jumperkappen auf die Pins der Anschlussleisten. Wenn Sie die Jumperkappen auf die Anschlüsse setzen, wird das Motherboard permanent beschädigt!

Anschluss	**Beschreibung**
Anschluss für das Floppy-Laufwerk (33-Pin FLOPPY1) (siehe S.2, No. 21)	  die rotgestreifte Seite auf Stift 1

Hinweis: Achten Sie darauf, dass die rotgestreifte Seite des Kabel mit der Stift 1-Seite des Anschlusses verbunden wird.

Primärer IDE-Anschluss (blau)
(39-pin IDE1, siehe S.2, No. 8)

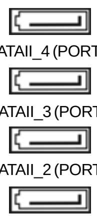


Blauer Anschluss zum Motherboard  Schwarzer Anschluss zur Festplatte

80-adriges ATA 66/100/133 Kabel

Hinweis: Details entnehmen Sie bitte den Anweisungen Ihres IDE-Gerätehändlers.

Seriell-ATAII-Anschlüsse
(SATAII_1 (PORT1): siehe S.2, No. 14)
(SATAII_2 (PORT2): siehe S.2, No. 13)
(SATAII_3 (PORT3): siehe S.2, No. 12)
(SATAII_4 (PORT4): siehe S.2, No. 11)



Diese vier Serial ATA (SATA II) -Anschlüsse unterstützen interne SATA- oder SATA II-Festplatten. Die aktuelle SATAII-Schnittstelle ermöglicht eine Datenübertragungsrate bis 3,0 Gb/s.

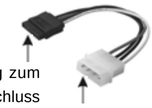
Serial ATA- (SATA-) Datenkabel
(Option)



SJedes Ende des SATA Datenkabels kann an die SATA / SATAII Festplatte oder das SATAII Verbindungsstück auf dieser Hauptplatine angeschlossen werden.

Deutsch

Serial ATA- (SATA-) Stromversorgungskabel
(Option)

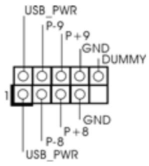


Verbindung zum SATA-HDD-Stromanschluss

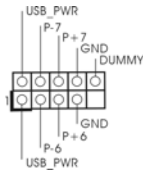
Verbindung zum Netzteil

Verbinden Sie das schwarze Ende des SATA-Netzkabels mit dem Netzanschluss am Laufwerk. Verbinden Sie dann das weiße Ende des SATA-Stromversorgungskabels mit dem Stromanschluss des Netzteils.

USB 2.0-Header
(9-pol. USB8_9)
(siehe S.2 - No. 16)

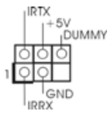


(9-pol. USB6_7)
(siehe S.2 - No. 15)



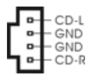
Zusätzlich zu den sechs üblichen USB 2.0-Ports an den I/O-Anschlüssen befinden sich zwei USB 2.0-Anschlussleisten am Motherboard. Pro USB 2.0-Anschlussleiste werden zwei USB 2.0-Ports unterstützt.

Infrarot-Modul-Header
(5-pin IR1)
(siehe S.2 - No. 30)



Dieser Header unterstützt ein optionales, drahtloses Sende- und Empfangs-Infrarotmodul.

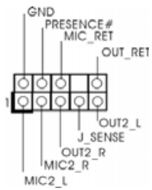
Interne Audio-Anschlüsse
(4-Pin CD1)
(CD1: siehe S.2, No. 29)



CD1

Diese ermöglichen Ihnen Stereo-Signalquellen, wie z. B. CD-ROM, DVD-ROM, TV-Tuner oder MPEG-Karten mit Ihrem System zu verbinden.

Anschluss für Audio auf der Gehäusevorderseite
(9-Pin HD_AUDIO1)
(siehe S.2, No. 22)



Dieses Interface zu einem Audio-Panel auf der Vorderseite Ihres Gehäuses, ermöglicht Ihnen eine bequeme Kontrolle über Audio-Geräte.

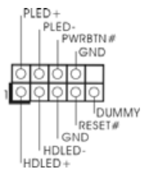
1. High Definition Audio unterstützt Jack Sensing (automatische Erkennung falsch angeschlossener Geräte), wobei jedoch die Bildschirmverdrahtung am Gehäuse HDA unterstützen muss, um richtig zu funktionieren. Beachten Sie bei der Installation im System die Anweisungen in unserem Handbuch und im Gehäusehandbuch.

Deutsch

2. Wenn Sie die AC’97-Audioleiste verwenden, installieren Sie diese wie nachstehend beschrieben an der Front-Audioanschlussleiste:
   - A. Schließen Sie Mic_IN (MIC) an MIC2_L an.
   - B. Schließen Sie Audio_R (RIN) an OUT2_R und Audio_L (LIN) an OUT2_L an.
   - C. Schließen Sie Ground (GND) an Ground (GND) an.
   - D. MIC_RET und OUT_RET sind nur für den HD-Audioanschluss gedacht. Diese Anschlüsse müssen nicht an die AC’97-Audioleiste angeschlossen werden.
   - E. Rufen Sie das BIOS-Setup-Dienstprogramm auf. Wechseln Sie zu Erweiterte Einstellungen und wählen Sie Chipset-Konfiguration. Setzen Sie die Option Frontleistenkontrolle von [Automatisch] auf [Aktiviert].
   - F. Rufen Sie das Windows-System auf. Klicken Sie auf das Symbol in der Taskleiste unten rechts, um den Realtek HD Audio-Manager aufzurufen. Für Windows® XP / XP 64-Bit Betriebssystem:
     Klicken Sie auf “Audio-E/A”, wählen Sie die “Anschlusseinstellungen”  , wählen Sie “Erkennung der Frontleistenbuchse deaktivieren” und speichern Sie die Änderung durch Klicken auf “OK”.
     Für Windows® Vista™ / Vista™ 64-Bit Betriebssystem:
     Die Rechtoberseite „Dateiordner“ Ikone anklicken  , „Schalttafel Buchse Entdeckung sperren“ wählen und die Änderung speichern, indem Sie „OKAY“ klicken.
   - G. Aktivierung des vorderseitigen Mikrofons.
     Für Betriebssystem Windows® XP / XP 64-Bit:
     Wählen Sie “Front Mic” (Vorderes Mikr.) als Standard-Aufnahmegerät. Möchten Sie Ihre Stimme über das vorderseitige Mikrofon hören, dann wählen Sie bitte das Symbol “Mute” (Stumm) unter “Front Mic” (Vorderes Mikr.) im Abschnitt “Playback” (Wiedergabe) ab.
     Für Betriebssystem Windows® Vista™ / Vista™ 64-Bit:
     Rufen Sie die Registerkarte “Front Mic” (Vorderes Mikr.) im Realtek-Bedienfeld auf. Klicken Sie auf “Set Default Device” (Standardgerät einstellen), um das vorderseitige Mikrofon als Standard-Aufnahmegerät zu übernehmen.

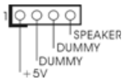
Deutsch

System Panel Anschluss
(9-Pin PANEL1)
(siehe S.2, No. 17)



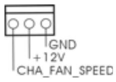
Dieser Anschluss ist für die verschiedenen Funktionen der Gehäusefront.

Gehäuselautsprecher-Header
(4-pin SPEAKER1)
(siehe S.2, No. 19)

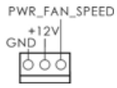


Schließen Sie den Gehäuselautsprecher an diesen Header an.

Gehäuse- und Stromlüfteranschlüsse
(3-pin CHA_FAN1)
(siehe S.2, No. 20)

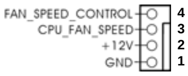


(3-pin PWR_FAN1)
(siehe S.2, No. 28)



Verbinden Sie die Lüfterkabel mit den Lüfteranschlüssen, wobei der schwarze Draht an den Schutzleiterstift angeschlossenwird.

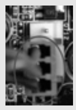
CPU-Lüfteranschluss
(4-pin CPU_FAN1)
(siehe S.2, No. 31)



Verbinden Sie das CPU - Lüfterkabel mit diesem Anschluss und passen Sie den schwarzen Draht dem Erdungsstift an.

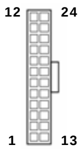
Obwohl dieses Motherboard einen vierpoligen CPU-Lüfteranschluss (Quiet Fan) bietet, können auch CPU-Lüfter mit dreipoligem Anschluss angeschlossen werden; auch ohne Geschwindigkeitsregulierung. Wenn Sie einen dreipoligen CPU-Lüfter an den CPU-Lüferanschluss dieses Motherboards anschließen möchten, verbinden Sie ihn bitte mit den Pins 1 – 3.

Pins 1–3 anschließen



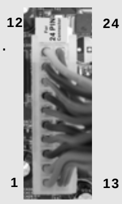
Lüfter mit dreipoligem Anschluss installieren

ATX-Netz-Header
(24-pin ATXPWR1)
(siehe S.2, No. 7)



Verbinden Sie die ATX-Stromversorgung mit diesem Header.

Obwohl dieses Motherboard einen 24-pol. ATX-Stromanschluss bietet, kann es auch mit einem modifizierten traditionellen 20-pol. ATX-Netzteil verwendet werden. Um ein 20-pol. ATX-Netzteil zu verwenden, stecken Sie den Stecker mit Pin 1 und Pin 13 ein.



Installation eines 20-pol. ATX-Netzteils

Deutsch

Anschluss für 12V-ATX-Netzteil
(4-pin ATX12V1)
(siehe S.2, No. 2)



Beachten Sie bitte, dass Sie eine Stromversorgung mit ATX 12-Volt-Stecker mit diesem Anschluss verbinden müssen, damit ausreichend Strom geliefert werden kann. Andernfalls reicht der Strom nicht aus, das System zu starten.

2. BIOS-Information

Das Flash Memory dieses Motherboards speichert das Setup-Utility. Drücken Sie <F2> während des POST (Power-On-Self-Test) um ins Setup zu gelangen, ansonsten werden die Testroutinen weiter abgearbeitet. Wenn Sie ins Setup gelangen wollen, nachdem der POST durchgeführt wurde, müssen Sie das System über die Tastenkombination <Ctrl> + <Alt> + <Delete> oder den Reset-Knopf auf der Gehäusevorderseite, neu starten. Natürlich können Sie einen Neustart auch durchführen, indem Sie das System kurz ab- und danach wieder anschalten.
Das Setup-Programm ist für eine bequeme Bedienung entwickelt worden. Es ist ein menügesteuertes Programm, in dem Sie durch unterschiedliche Untermenüs scrollen und die vorab festgelegten Optionen auswählen können. Für detaillierte Informationen zum BIOS-Setup, siehe bitte das Benutzerhandbuch (PDF Datei) auf der Support CD.

3. Software Support CD information

Dieses Motherboard unterstützt eine Reiche von Microsoft® Windows® Betriebssystemen: XP / XP Media Center / XP 64-Bit / Vista™ / Vista™ 64-Bit. Die Ihrem Motherboard beigefügte Support-CD enthält hilfreiche Software, Treiber und Hilfsprogramme, mit denen Sie die Funktionen Ihres Motherboards verbessern können Legen Sie die Support-CD zunächst in Ihr CD-ROM-Laufwerk ein. Der Willkommensbildschirm mit den Installationsmenüs der CD wird automatisch aufgerufen, wenn Sie die "Autorun"-Funktion Ihres Systems aktiviert haben. Erscheint der Wilkommensbildschirm nicht, so "doppelklicken" Sie bitte auf das File ASSETUP. EXE im BIN-Verzeichnis der Support-CD, um die Menüs aufzurufen. Das Setup-Programm soll es Ihnen so leicht wie möglich machen. Es ist menügesteuert, d.h. Sie können in den verschiedenen Untermenüs Ihre Auswahl treffen und die Programme werden dann automatisch installiert.

1. Introduction

Merci pour votre achat d'une carte mère ASRock ***M3A-GLAN*** une carte mère très fiable produite selon les critères de qualité rigoureux de ASRock. Elle offre des performances excellentes et une conception robuste conformément à l'engagement d'ASRock sur la qualité et la fiabilité au long terme.

Ce Guide d'installation rapide présente la carte mère et constitue un guide d'installation pas à pas. Des informations plus détaillées concernant la carte mère pourront être trouvées dans le manuel l'utilisateur qui se trouve sur le CD d'assistance.

Les spécifications de la carte mère et le BIOS ayant pu être mis à jour, le contenu de ce manuel est sujet à des changements sans notification. Au cas où n'importe qu'elle modification intervenait sur ce manuel, la version mise à jour serait disponible sur le site web ASRock sans nouvel avis. Vous trouverez les listes de prise en charge des cartes VGA et CPU également sur le site Web ASRock.
Site web ASRock, http://www.asrock.com
Si vous avez besoin de support technique en relation avec cette carte mère, veuillez consulter notre site Web pour de plus amples informations particulières au modèle que vous utilisez.
www.asrock.com/support/index.asp

1.1 Contenu du paquet

Carte mère ASRock ***M3A-GLAN***
(Facteur de forme ATX: 12.0 pouces x 7.8 pouces, 30.5 cm x 19.8 cm)
Guide d'installation rapide ASRock ***M3A-GLAN***
CD de soutien ASRock ***M3A-GLAN***
Un câble ruban IDE Ultra ATA 66/100/133 80 conducteurs
Un câble de données Serial ATA (SATA) (Optionnelle)
Un cordon d'alimentation DD série ATA (SATA) (Optionnelle)
Un écran I/O

Français

1.2 Spécifications

Format	- Facteur de forme ATX: 12.0 pouces x 7.8 pouces, 30.5 cm x 19.8 cm
CPU	- Prise en charge des processeurs Socket AM2+ / AM2: AMD Phenom™ FX / Phenom / Athlon 64 FX / Athlon 64 X2 Dual-Core / Athlon X2 Dual-Core / Athlon 64 / processeur Sempron - Prise en charge des processeurs sur AM3: Processeur Phenom™ II X4 / X3 / X2 et Athlon II X4 / X3 / X2 d'AMD - Prêt AMD LIVE!™ - Supporte la technologie Cool 'n' Quiet™ d'AMD - FSB 1000 MHz (2.0 GT/s) - Prend en charge la technologie Untied Overclocking (voir **ATTENTION 1**) - Prise en charge de la technologie Hyper Transport
Chipsets	- Northbridge: AMD 480X CrossFire™ - Southbridge: AMD SB600
Mémoire	- Compatible avec la Technologie de Mémoire à Canal Double (voir **ATTENTION 2**) - 4 x slots DIMM DDR2 - Supporter DDR2 1066/800/667/533 non-ECC, sans amortissement mémoire (voir **ATTENTION 3**) - Capacité maxi de mémoire système: 16GB (voir **ATTENTION 4**)
Slot d'extension	- 1 x slot PCI Express x16 - 2 x slots PCI Express x1 - 3 x slots PCI
Audio	- 5.1 Son haute définition de première qualité CH Windows® Vista™ (codec audio ALC662)
LAN	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111DL - Support du Wake-On-LAN
Panneau arrière E/S	ASRock HD 6CH I/O - 1 x port souris PS/2 - 1 x port clavier PS/2 - 1 x port série: COM 1 - 1 x port parallèle: Support ECP/EPP - 6 x ports USB 2.0 par défaut - 1 x port LAN RJ-45 avec LED (ACT/LED CLIGNOTANTE et LED VITESSE) - Jack audio: entrée ligne / sortie ligne / microphone

Français

Connecteurs	- 4 x connecteurs SATAII, prennent en charge un taux de transfert de données pouvant aller jusqu'à 3.0Go/s, supporte RAID (RAID 0, RAID 1 et RAID 10), NCQ, AHCI et "Hot-Plug" (Connexion à chaud) (voir **ATTENTION 5**) - 1 x ATA133 IDE connecteurs (prend en charge jusqu'à 2 périphériques IDE) - 1 x Port Disquette - 1 x En-tête du module infrarouge - Connecteur pour ventilateur de CPU/Châssis/Ventilateur - br. 24 connecteur d'alimentation ATX - br. 4 connecteur d'alimentation 12V ATX - Connecteurs audio internes - Connecteur audio panneau avant - 2 x En-tête USB 2.0 (prendre en charge 4 ports USB 2.0 supplémentaires) (voir **ATTENTION 6**)
BIOS	- 4Mb BIOS AMI - BIOS AMI - Support du "Plug and Play" - Compatible pour événements de réveil ACPI 1.1 - Gestion jumperless - Support SMBIOS 2.3.1 - CPU Tension Multi-ajustement - Prise en charge du Smart BIOS
CD d'assistance	- Pilotes, utilitaires, logiciel anti-virus (Version d'essai)
Caractéristique unique	- Tuner ASRock OC (voir **ATTENTION 7**) - Économiseur d'énergie intelligent (voir **ATTENTION 8**) - l'Instant Boot - ASRock Instant Flash (voir **ATTENTION 9**) - L'accélérateur hybride: - Contrôle direct de la fréquence CPU (voir **ATTENTION 10**) - ASRock U-COP (voir **ATTENTION 11**) - Garde d'échec au démarrage (B.F.G.) - ASRock AM2 Boost: Technologie brevetée par ASRock pour augmenter les performances mémoire jusqu'à 12,5% (voir **ATTENTION 12**)
Surveillance système	- Contrôle de la température CPU - Mesure de température de la carte mère - Tachéomètre ventilateur CPU/Châssis/Ventilateur - Ventilateur silencieux d'unité centrale - Monitoring de la tension: +12V, +5V, +3.3V, Vcore

Français

OS	- Microsoft® Windows® XP / XP Media Center / XP 64-bit / Vista™ / Vista™ 64-bit
Certifications	- FCC, CE, WHQL

* Pour de plus amples informations sur les produits, s'il vous plaît visitez notre site web: http://www.asrock.com

ATTENTION

Il est important que vous réalisiez qu'il y a un certain risque à effectuer l'overclocking, y compris ajuster les réglages du BIOS, appliquer la technologie Untied Overclocking, ou utiliser des outils de tiers pour l'overclocking. L'overclocking peut affecter la stabilité de votre système, ou même causer des dommages aux composants et dispositifs de votre système. Si vous le faites, c'est à vos frais et vos propres risques. Nous ne sommes pas responsables des dommages possibles causés par l'overclocking.

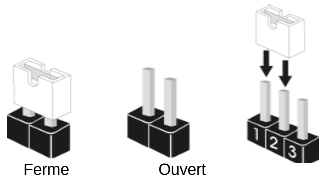
ATTENTION!

1. Cette carte mère prend en charge la technologie Untied Overclocking. Veuillez lire "La technologie de surcadençage à la volée" à la page 20 pour plus d'informations.
2. Cette carte mère supporte la Technologie de Mémoire à Canal Double. Avant d'intégrer la Technologie de Mémoire à Canal Double, assurez-vous de bien lire le guide d'installation des modules mémoire en page 11 pour réaliser une installation correcte.
3. La prise en charge de fréquences de mémoire de 1066MHz dépend du CPU AM2+ que vous choisissez. Si vous choisissez des barrettes de mémoire DDR2 1066 sur cette carte mère, veuillez vous référer à la liste des mémoires prises en charge sur notre site Web pour connaître barrettes de mémoire compatibles.
   Site Web ASRock http://www.asrock.com
4. Du fait des limites du système d'exploitation, la taille mémoire réelle réservée au système pourra être inférieure à 4 Go sous Windows® XP et Windows® Vista™. Avec Windows® XP 64 bits et Windows® Vista™ 64 bits avec CPU 64 bits, il n'y a pas ce genre de limitation.
5. Avant d'installer le disque dur SATAII au connecteur SATAII, veuillez lire le Guide « Installation du disque dur SATAII » à la page 22 du « Manuel de l'utilisateur » qui se trouve sur le CD de support pour régler votre lecteur de disque dur SATAII au mode SATAII. Vous pouvez aussi directement connecter le disque dur SATA au connecteur SATAII.
6. La gestion de l'alimentation pour l'USB 2.0 fonctionne bien sous Microsoft® Windows® Vista™ 64-bit/ Vista™ / XP 64-bit / XP SP1; SP2.
7. Il s'agit d'un usage facile ASRock overclocking outil qui vous permet de surveiller votre système en fonction de la monitrice de matériel et overclocker vos périphériques de matériels pour obtenir les meilleures performances du système sous environnement Windows®. S'il vous plaît visitez notre site web pour le fonctionnement des procédures de Tuner ASRock OC.
   ASRock website: http://www.asrock.com

8. Avec une conception matérielle et logicielle propriétaire avancée, Intelligent Energy Saver (L'économiseur d'énergie intelligent) est une technologie révolutionnaire qui apporte des économies d'énergie sans précédent. Le régulateur de tension permet de réduire le nombre de phases de sortie pour améliorer le rendement lorsque les noyaux du CPU sont en veille. En d'autre termes, il peut amener des économies d'énergie exceptionnelles et améliorer le rendement énergétique sans sacrifier aux performances de calcul. Pour utiliser la fonction Intelligent Energy Saver (L'économiseur d'énergie intelligent), veuillez activer
l'option Cool 'n' Quiet dans l'outil de configuration du BIOS par avance. Veuillez visiter notre site Web pour connaître les procédures d'utilisation de l' Intelligent Energy Saver (L'économiseur d'énergie intelligent).
Site Web d'ASRock: http://www.asrock.com
9. O ASRock Instant Flash é um utilitário de flash do BIOS incorporado na memória Flash ROM. Esta prática ferramenta de actualização do BIOS permite-lhe actualizar o BIOS do sistema sem necessitar de entrar nos sistemas operativos, como o MS-DOS ou o Windows®. Com este utilitário, poderá premir a tecla <F6> durante o teste de arranque POST ou premir a tecla <F2> para exibir o menu de configuração do BIOS para aceder ao ASRock Instant Flash. Execute esta ferramenta para guardar o novo ficheiro de BIOS numa unidade flash USB, numa disquete ou num disco rígido, em seguida, poderá actualizar o BIOS com apenas alguns cliques sem ter de utilizar outra disquete ou outro complicado utilitário de flash. Note que a unidade flash USB ou a unidade de disco rígido devem utilizar o sistema de ficheiros FAT32/16/12.
10. Même si cette carte mère offre un contrôle sans souci, il n'est pas recommandé d'y appliquer un over clocking. Les fréquences autres que les fréquences de bus d'UC recommandées risquent de déstabiliser le système ou d'endommager l'UC.
11. Lorsqu'une surchauffe du CPU est détectée, le système s'arrête automatiquement. Avant de redémarrer le système, veuillez vérifier que le ventilateur d'UC sur la carte mère fonctionne correctement et débranchez le cordon d'alimentation, puis rebranchez-le. Pour améliorer la dissipation de la chaleur, n'oubliez pas de mettre de la pâte thermique entre le CPU le dissipateur lors de l'installation du PC.
12. Cette carte mère prend en charge la technologie d'overbooking ASRock AM2 Boost. Si vous activez cette fonction dans la configuration du BIOS, les performances de la mémoire d'améliorent jusqu'à 12,5%, lais l'effet dépend du CPU AM2 que vous adoptez. L'activation de cette fonction accélère l'horloge de référence du chipset/CPU. Cependant, nous ne pouvons par garantir la stabilité du système pour toutes les configurations CPU/DRAM. Si votre systèmes devient instable une fois la fonction AM2 Boost activée, il est possible qu'elle ne s'applique pas à votre système. Vous pouvez choisir de désactiver cette fonction pour conserver la stabilité de votre système.

1.3 Réglage des cavaliers

L'illustration explique le réglage des cavaliers. Quand un capuchon est placé sur les broches, le cavalier est « FERME ». Si aucun capuchon ne relie les broches,le cavalier est « OUVERT ». L'illustration montre un cavalier à 3 broches dont les broches 1 et 2 sont « FERMEES » quand le capuchon est placé sur ces 2 broches.



Le cavalier		Description
PS2_USB_PW1 (voir p.2 fig. 1)		Court-circuitez les broches 2 et 3 pour choisir +5VSB (standby) et permettre aux périphériques PS/2 ou USB de réveiller le système.

Note: Pour sélectionner +5VSB, il faut obligatoirement 2 Amp et un courant standby supérieur fourni par l'alimentation.

Effacer la CMOS (CLRCMOS1) (voir p.2 fig. 24)	 Paramètres par défaut / Effacer la CMOS	

Note: CLRCMOS1 vous permet d'effacer les données qui se trouvent dans la CMOS. Les données dans la CMOS comprennent les informations de configuration du système telles que le mot de passe système, la date, l'heure et les paramètres de configuration du système. Pour effacer et réinitialiser les paramètres du système pour retrouver la configuration par défaut, veuillez mettre l'ordinateur hors tension et débrancher le cordon d'alimentation de l'alimentation électrique. Attendez 15 secondes, puis utilisez un capuchon de cavalier pour court-circuiter la broche 2 et la broche 3 sur CLRCMOS1 pendant 5 secondes. Après avoir court-circuité le cavalier Effacer la CMOS, veuillez enlever le capuchon de cavalier. Toutefois, veuillez ne pas effacer la CMOS tout de suite après avoir mis le BIOS à jour. Si vous avez besoin d'effacer la CMOS lorsque vous avez fini de mettre le BIOS à jour, vous devez d'abord initialiser le système, puis le mettre hors tension avant de procéder à l'opération d'effacement de la CMOS.

1.4 Connecteurs

> Les connecteurs NE SONT PAS des cavaliers. NE PLACEZ AUCUN capuchon sur ces connecteurs. Poser les bouchons pour cavaliers audessus des connecteurs provoquera des dommages irrémédiables à la carte mère!

Les connecteurs		**Description**

Connecteur du lecteur de disquette
(FLOPPY1 br. 33)
(voir p.2 fig. 21)

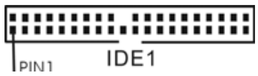




le côté avec fil rouge côté Broche1

Note: Assurez-vous que le côté avec fil rouge du câble est bien branché sur le côté Broche1 du connecteur.

Connecteur IDE primaire (bleu)
(IDE1 br. 39, voir p.2 No. 8)



connecteur bleu vers la carte mère

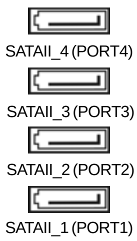


connecteur noir vers le disque dur

Câble ATA 66/100/133 80 conducteurs

Note: Veuillez vous reporter aux instructions du fabricant de votre IDE périphérique pour les détails.

Connecteurs Série ATAII
(SATAII_1 (PORT1): voir p.2 No. 14)
(SATAII_2 (PORT2): voir p.2 No. 13)
(SATAII_3 (PORT3): voir p.2 No. 12)
(SATAII_4 (PORT4): voir p.2 No. 11)



Ces quatre connecteurs Série ATAII (SATAII) prennent en charge les câbles SATA pour les périphériques de stockage internes. L'interface SATAII actuelle permet des taux transferts de données pouvant aller jusqu'à 3,0 Gb/s.

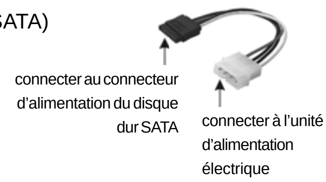
Câble de données Série ATA (SATA)
(en option)



Toute cote du cable de data SATA peut etre connecte au disque dur SATA / SATAII ou au connecteur SATAII sur la carte mere.

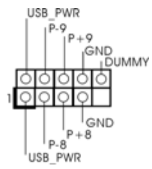
Français

Cordon d'alimentation
Série ATA (SATA)
(en option)

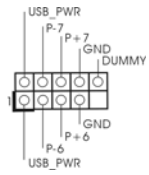


Veuillez connecter l'extrémité noire du cordon d'alimentation SATA sur le connecteur d'alimentation sur chaque unité. Connectez ensuite l'extrémité blanche du cordon d'alimentation SATA sur le connecteur d'alimentation de l'unité d'alimentation électrique.

En-tête USB 2.0
(USB8_9 br.9)
(voir p.2 No. 14)

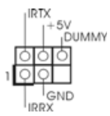


(USB6_7 br.9)
(voir p.2 No. 15)



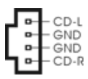
A côté des six ports USB 2.0 par défaut sur le panneau E/S, il y a dos embases USB 2.0 sur cette carte mère. Chaque embase USB 2.0 peut prendre en charge 2 ports USB 2.0.

En-tête du module infrarouge
(IR1 br.5)
(voir p.2 No. 30)



Cet en-tête supporte un module infrarouge optionnel de transfert et de réception sans fil.

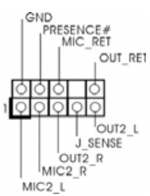
Connecteurs audio internes
(CD1 br. 4)
(CD1: voir p.2 fig. 29)



CD1

Ils vous permettent de gérer des entrées audio à partir de sources stéréo comme un CD-ROM, DVD-ROM, un tuner TV ou une carte MPEG.

Connecteur audio panneau avant
(HD_AUDIO1 br. 9)
(voir p.2 fig. 22)

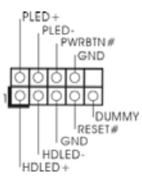


C'est une interface pour un câble audio en façade qui permet le branchement et le contrôle commodes de périphériques audio.

Français

1. L’audio à haute définition (HDA) prend en charge la détection de fiche, mais le fil de panneau sur le châssis doit prendre en charge le HDA pour fonctionner correctement. Veuillez suivre les instructions dans notre manuel et le manuel de châssis afin installer votre système.
2. Si vous utilisez le panneau audio AC’97, installez-le sur l’adaptateur audio du panneau avant conformément à la procédure ci-dessous :
   A. Connectez Mic_IN (MIC) à MIC2_L.
   B. Connectez Audio_R (RIN) à OUT2_R et Audio_L (LIN) à OUT2_L.
   C. Connectez Ground (GND) à Ground (GND).
   D. MIC_RET et OUT_RET sont réservés au panneau audio HD. Vous n’avez pas besoin de les connecter pour le panneau audio AC’97.
   E. Entrer dans l’utilitaire de configuration du BIOS. Saisir les Paramètres avancés puis sélectionner Configuration du jeu de puces. Définir l’option panneau de commande de [Auto] à [Activé].
   F. Entrer dans le système Windows. Cliquer sur l’icône sur la barre de tâches dans le coin inférieur droite pour entrer dans le Gestionnaire audio Realtek HD.
   Pour Windows® XP / XP 64-bit OS:
   Cliquer sur « E/S audio», sélectionner « Paramètres du connecteur »  , choisir « Désactiver la détection de la prise du panneau de commande » et sauvegarder les changements en cliquant sur « OK ».
   Pour Windows® Vista™ / Vista™ 64-bit OS:
   Cliquer droit “Fichier” icone  , selectionner” la detection incapable de jack de panel d’avant “ et sauvegarder le changement par cliquer”ok”.
   G. Pour activer le mic.
   Pour les SE Windows® XP / XP 64 bits :
   Veuillez sélectionner “Front Mic” (Mic. Avant) comme le dispositif d’enregistrement par défaut.
   Si vous voulez entendre votre voix à travers le mic. avant veuillez désactiver l’icône «Silence» dans “Front Mic” (Mic. Avant) de la portion “Playback” (Lecture).
   Pour les SE Windows® Vista™ / Vista™ 64 bits :
   Allez à l’onglet «Front Mic» (Mic. Avant) dans le panneau de commandes Realtek.
   Cliquez sur «Configurer le dispositif par défaut» pour faire du Mic Avant le dispositif d’enregistrement par défaut.

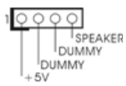
Connecteur pour panneau
(PANEL1 br. 9)
(voir p.2 fig. 17)



Ce connecteur offre plusieurs fonctions système en façade.

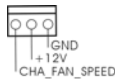
Français

Connecteur du haut-parleur du châssis
(SPEAKER1 br. 4)
(voir p.2 fig. 19)

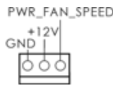


Veuillez connecter le haut-parleur de châssis sur ce connecteur.

Connecteur pour châssis et ventilateur
(CHA_FAN1 br. 3)
(voir p.2 No. 20)

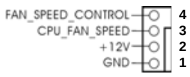


(PWR_FAN1 br. 3)
(voir p.2 No. 28)



Branchez les câbles du ventilateur aux connecteurs pour ventilateur et faites correspondre le fil noir à la broche de terre.

Connecteur pour ventilateur CPU
(CPU_FAN1 br. 4)
(voir p.2 fig. 31)



Veuillez connecter un câble de ventilateur d'UC sur ce connecteur et brancher le fil noir sur la broche de terre.

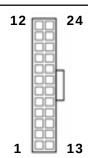
ien que cette carte mère offre un support de (Ventilateur silencieux) ventilateur de CPU à 4 broches , le ventilateur de CPU à 3 broches peut bien fonctionner même sans la fonction de commande de vitesse du ventilateur. Si vous prévoyez de connecter le ventilateur de CPU à 3 broches au connecteur du ventilateur de CPU sur cette carte mère, veuillez le connecter aux broches 1-3.

Installation de ventilateur à 3 broches



Broches 1-3 connectées

Connecteur d'alimentation ATX
(ATXPWR1 br. 24)
(voir p.2 fig. 7)



Veuillez connecter une unité d'alimentation ATX sur ce connecteur.

Bien que cette carte mère fournisse un connecteur de courant ATX 24 broches, elle peut encore fonctionner si vous adopter une alimentation traditionnelle ATX 20 broches. Pour utiliser une alimentation ATX 20 broches, branchez à l'alimentation électrique ainsi qu'aux broches 1 et 13.



20-Installation de l'alimentation électrique ATX

Français

Connecteur d'alimentation 12V ATX (ATX12V1 br. 4) (voir p.2 fig. 2)		Veuillez noter qu'il est nécessaire de connecter une unité d'alimentation électrique avec prise ATX 12V sur ce connecteur afin d'avoir une alimentation suffisante. Faute de quoi, il ne sera pas possible de mettre sous tension.

2. Informations sur le BIOS

La puce Flash Memory sur la carte mère stocke le Setup du BIOS. Lorsque vous démarrez l'ordinateur, veuillez presser <F2> pendant le POST (Power-On-Self-Test) pour entrer dans le BIOS; sinon, le POST continue ses tests de routine. Si vous désirez entrer dans le BIOS après le POST, veuillez redémarrer le système en pressant <Ctl> + <Alt> + <Suppr>, ou en pressant le bouton de reset sur le boîtier du système. Vous pouvez également redémarrer en éteignant le système et en le rallumant. L'utilitaire d'installation du BIOS est conçu pour être convivial. C'est un programme piloté par menu, qui vous permet de faire défiler par ses divers sous-menus et de choisir parmi les choix prédéterminés. Pour des informations détaillées sur le BIOS, veuillez consulter le Guide de l'utilisateur (fichier PDF) dans le CD technique.

3. Informations sur le CD de support

Cette carte mère supporte divers systèmes d'exploitation Microsoft® Windows®: XP / XP Media Center / XP 64-bit / Vista™ / Vista™ 64 bits. Le CD technique livré avec cette carte mère contient les pilotes et les utilitaires nécessaires pour améliorer les fonctions de la carte mère. Pour utiliser le CD technique, insérez-le dans le lecteur de CD-ROM. Le Menu principal s'affiche automatiquement si "AUTORUN" est activé dans votre ordinateur. Si le Menu principal n'apparaît pas automatiquement, localisez dans le CD technique le fichier "ASSETUP.EXE" dans le dossier BIN et double-cliquez dessus pour afficher les menus.

Français

1. Introduzione

Grazie per aver scelto una scheda madre ASRock ***M3A-GLAN***, una scheda madre affidabile prodotta secondo i severi criteri di qualità ASRock. Le prestazioni eccellenti e il design robusto si conformano all'impegno di ASRock nella ricerca della qualità e della resistenza. Questa Guida Rapida all'Installazione contiene l'introduzione alla motherboard e la guida passo-passo all'installazione. Informazioni più dettagliate sulla motherboard si possono trovare nel manuale per l'utente presente nel CD di supporto.

> Le specifiche della scheda madre e il software del BIOS possono essere aggiornati, pertanto il contenuto di questo manuale può subire variazioni senza preavviso. Nel caso in cui questo manuale sia modificato, la versione aggiornata sarà disponibile sul sito di ASRock senza altro avviso. Sul sito ASRock si possono anche trovare le più recenti schede VGA e gli elenchi di CPU supportate.
> ASRock website http://www.asrock.com
> Se si necessita dell'assistenza tecnica per questa scheda madre, visitare il nostro sito per informazioni specifiche sul modello che si sta usando.
> www.asrock.com/support/index.asp

1.1 Contenuto della confezione

Scheda madre ASRock ***M3A-GLAN***
(ATX Form Factor: 12.0-in x 7.8-in, 30.5 cm x 19.8 cm)
Guida di installazione rapida ASRock ***M3A-GLAN***
CD di supporto ASRock ***M3A-GLAN***
Un cavo IDE 80-pin Ultra ATA 66/100/133
Un cavo dati Serial ATA (SATA) (Opzionale)
Un cavo alimentatore HDD Serial ATA (SATA) (Opzionale)
Un I/O Shield

1.2 Specifiche

Piattaforma	- ATX Form Factor: 12.0-in x 7.8-in, 30.5 cm x 19.8 cm
Processore	- Supporto per processori Socket AM2+ / AM2: AMD Phenom™ FX / Phenom / Athlon 64 FX / Athlon 64 X2 Dual-Core / Athlon X2 Dual-Core / Athlon 64 / processore Sempron - Supporto di processori AM3: AMD Phenom™ II X4 / X3 / X2 e Athlon II X4 / X3 / X2 - Pronto AMD LIVE!™ - Supporto tecnologia AMD Cool 'n' Quiet™ - FSB 1000 MHz (2.0 GT/s) - Supporta la tecnologia overclocking "slegata" (vedi **ATTENZIONE 1**) - Supporta la tecnologia Hyper-Transport
Chipset	- Northbridge: AMD 480X CrossFire™ - Southbridge: AMD SB600
Memoria	- Supporto tecnologia Dual Channel Memory (vedi **ATTENZIONE 2**) - 4 x slot DDR2 DIMM - Supporto DDR2 1066/800/667/533 non-ECC, momoria senza buffer (vedi **ATTENZIONE 3**) - Capacità massima della memoria di sistema: 16GB (vedi **ATTENZIONE 4**)
Slot di espansione	- 1 x slot PCI Express x16 - 2 x slot PCI Express x1 - 3 x slot PCI
Audio	- 5.1 Audio HD CH Windows® Vista™ Premium Level (ALC662 Audio Codec)
LAN	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111DL - Supporta Wake-On-LAN
Pannello posteriore I/O	ASRock HD 6CH I/O - 1 x porta PS/2 per mouse - 1 x porta PS/2 per tastiera - 1 x Porta COM - 1 x Porta parallela: supporto ECP/EPP - 6 x porte USB 2.0 già integrate - 1 x porte LAN RJ-45 con LED (LED azione/collegamento e LED velocità) - Audio Jack: Line In / Line Out / Microfono

Italiano

Connettori	- 4 x connettori SATAII 3.0Go/s, sopporta RAID (RAID 0, RAID 1, e RAID 10), NCQ, AHCI e “Collegamento a caldo” (vedi **ATTENZIONE 5**) - 1 x connettori ATA133 IDE (supporta fino a 2 dispositivi IDE) - 1 x porta Floppy - 1 x Collettore modulo infrarossi - Connettore CPU/Chassis/Alimentazione ventola - 24-pin collettore alimentazione ATX - 4-pin connettore ATX 12V - Connettori audio interni - Connettore audio sul pannello frontale - 2 x Collettore USB 2.0 (supporta 4 porte USB 2.0) (vedi **ATTENZIONE 6**)
BIOS	- 4Mb AMI BIOS - Suppor AMI legal BIOS - Supporta “Plug and Play” - Compatibile con ACPI 1.1 wake up events - Supporta jumperfree - Supporta SMBIOS 2.3.1 - Regolazione multi-voltaggio CPU - Smart BIOS supportato
CD di supporto	- Driver, utilità, software antivirus (Versione dimostrativa)
Caratteristi-ca speciale	- Sintonizzatore ASRock OC (vedi **ATTENZIONE 7**) - Intelligent Energy Saver (Risparmio intelligente dell’energia) (vedi **ATTENZIONE 8**) - Instant Boot - ASRock Instant Flash (vedi **ATTENZIONE 9**) - Booster ibrido: - Stepless control per frequenza del processore (vedi **ATTENZIONE 10**) - ASRock U-COP (vedi **ATTENZIONE 11**) - Boot Failure Guard (B.F.G.) - ASRock AM2 Boost: Tecnologia brevettata ASRock per migliorare le prestazioni della memoria fino al 12,5% (vedi **ATTENZIONE 12**)
Monitor-aggio Hardware	- Sensore per la temperatura del processore - Sensore temperatura scheda madre - Indicatore di velocita per la ventola del CPU/Chassis/ Alimentazione - Ventola CPU silenziosa - Voltaggio: +12V, +5V, +3.3V, Vcore

Italiano

Compatibilità SO	- Microsoft® Windows® XP / Centro multimediale XP / XP 64 bit Vista™ / Vista™ 64 bit
Certificazioni	- FCC, CE, WHQL

* Per ulteriori informazioni, prego visitare il nostro sito internet: http://www.asrock.com

AVVISO

Si prega di prendere atto che la procedura di overclocking implica dei rischi, come anche la regolazione delle impostazioni del BIOS, l'applicazione della tecnologia Untied Overclocking Technology, oppure l'uso di strumenti di overclocking forniti da terzi. L'overclocking può influenzare la stabilità del sistema, ed anche provocare danni ai componenti ed alle periferiche del sistema. La procedura è eseguita a proprio rischio ed a proprie spese. Noi non possiamo essere ritenuti responsabili per possibili danni provocati dall'overclocking.

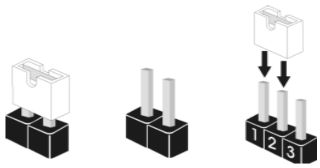
ATTENZIONE!

1. Questa scheda madre supporta la tecnologia overclocking "slegata". Per i dettagli leggere "Tecnologia di Untied Overclocking" a pagina 20.
2. Questa scheda madre supporta la tecnologia Dual Channel Memory. Prima di implementare la tecnologia Dual Channel Memory, assicurarsi di leggere la guida all'installazione dei moduli di memoria, a pagina 11, per seguire un'installazione appropriata.
3. Il fatto che la velocità della memoria da 1066MHz sia supportata o meno, dipende dagli AM2+ CPU utilizzati. Se si desidera adottare il modulo di memoria DDR2 1066 su questa scheda madre, fare riferimento all'elenco delle memorie supportate nel nostro sito web per scoprire quali sono i moduli compatibili.
   Sito web ASRock http://www.asrock.com
4. A causa delle limitazioni del sistema operativo, le dimensioni effettive della memoria possono essere inferiori a 4GB per l'accantonamento riservato all'uso del sistema sotto Windows® XP e Windows® Vista™. Per Windows® XP 64-bit e Windows® Vista™ 64-bit con CPU 64-bit, non c'è tale limitazione.
5. Prima di installare il disco rigido SATAII con il connettore SATAII, leggere la "Guida per la configurazione del disco rigido SATAII" a pagina 22 del "Manuale utente" nel CD in dotazione in modo da poter predisporre il disco rigido SATAII per la modalità SATAII. È anche possibile connettere il disco rigido SATA direttamente al connettore SATAII.
6. La Gestione Risorse per USB 2.0 funziona perfettamente con Microsoft® Windows® Vista™ 64-bit / Vista™ / XP 64 bit / XP SP1; SP2.
7. Si tratta di uno strumento di sicronizzazione ASRock di face uso in grado di implementare il controllo del sistema tramite la funzione di hardware monitor e sincronizzare le Vostre unita' hardware per ottenere la migliore prestazione in Windows®. Prego visitare il nostro sito Internet per ulteriori dettagli circa l'uso del Sintonizzatore ASRock OC.
   ASRock website: http://www.asrock.com

8. Grazie ad un innovative hardware proprietario ed alla progettazione specifica del software, Intelligent Energy Saver (Risparmio intelligente dell'energia), è una tecnologia rivoluzionaria che consente di realizzare risparmi energetici senza pari. Il regolatore di tensione è in grado di ridurre il numero di fasi in uscita in modo da migliorare l'efficienza quando i nuclei della CPU sono inattivi. In alter parole, permette di realizzare risparmi energetica senza pari e di migliorare l'efficienza energetica senza ridurre le prestazioni del computer. Per usare la funzione Intelligent Energy Saver (Risparmio intelligente dell'energia), attivare l'opzione Cool 'n' Quiet nella configurazione avanzata del BIOS. Si prega di visitare il nostro sito Internet per le procedure di funzionamento dell'Intelligent Energy Saver (Risparmio intelligente dell'energia).
   Sito Internet di ASRock: http://www.asrock.com
9. ASRock Instant Flash è una utilità Flash BIOS integrata nella Flash ROM. Questo comodo strumento d'aggiornamento del BIOS permette di aggiornare il sistema BIOS senza accedere a sistemi operativi come MS-DOS or Windows®. Con questa utilità, si può premere il tasto <F6> durante il POST, oppure il tasto <F2> nel menu BIOS per accedere ad ASRock Instant Flash. Avviare questo strumento e salvare il nuovo file BIOS nell'unità Flash USB, dischetto (disco floppy) o disco rigido; poi si può aggiornare il BIOS con pochi clic, senza preparare altri dischetti (dischi floppy) o altre complicate utilità Flash. Si prega di notare che l'unità Flash USB o il disco rigido devono usare il File System FAT32/16/12.
10. Anche se questa motherboard offre il controllo stepless, non si consiglia di effettuare l'overclocking. L'uso di frequenze diverse da quelle raccomandate per il bus CPU possono provocare l'instabilità del sistema o danneggiare la CPU.
11. Se il processore si surriscalda, il sistema si chiude automaticamente. Prima di riavviare il sistema, assicurarsi che la ventolina CPU della scheda madre funzioni correttamente; scollegare e ricollegare il cavo d'alimentazione. Per migliorare la dissipazione del calore, ricordare di applicare l'apposita pasta siliconica tra il processore e il dissipatore quando si installa il sistema.
12. Questa scheda madre supporta la tecnologia di overclocking ASRock AM2 Boost. Se si abilita questa funzione nel Setup del BIOS, le prestazioni della memoria miglioreranno fino al 12,5%, per gli effetti dipendono sempre dalla CPU AM2 che si adotta. Abilitare questa funzione provocherà l'overclock della frequenza di case del chipset/CPU. Tuttavia, non possiamo garantire la stabilità del sistema per tutte le configurazioni CPU/DRAM. Se il sistema è instabile dopo avere abilitato la funzione AM2 Boost, significa che la funzione non è adatta al sistema. Si può scegliere di disabilitare la funzione per mantenere la stabilità del sistema.

1.3 Setup dei Jumpers

L'illustrazione mostra come sono settati i jumper. Quando il ponticello è posizionato sui pin, il jumper è "CORTOCIRCUITATO". Se sui pin non ci sono ponticelli, il jumper è "APERTO". L'illustrazione mostra un jumper a 3 pin in cui il pin1 e il pin2 sono "CORTOCIRCUITATI" quando il ponticello è posizionato su questi pin.



CORTOCIRCUITATO APERTO

Jumper	Settaggio del Jumper	
PS2_USB_PW1 (vedi p.2 item 1)		Cortocircuitare pin2, pin3 per settare a +5VSB (standby) e abilitare PS/2 o USB wake up events.

Nota: Per selezionare +5VSB, si richiedono almeno 2 Ampere e il consumo di corrente in standby sarà maggiore.

Resettare la CMOS (CLRCMOS1) (vedi p.2 item 24)		
	Impostazione predefinita	Azzeramento CMOS

Nota: CLRCMOS1 permette di cancellare i dati presenti nel CMOS. I dati del CMOS comprendono le informazioni di configurazione quali la password di sistema, data, ora, e i parametri di configurazione del sistema. Per cancellare e ripristinare i parametri del sistema, spegnere il computer e togliere il cavo di alimentazione dalla presa di corrente. Dopo aver lasciato trascorrere 15 secondi, utilizzare un cappuccio jumper per cortocircuitare i pin 2 e 3 su CLRCMOS1 per 5 secondi. Dopo aver cortocircuitato il jumper Clear CMOS jumper, togliere il terminatore jumper. Non cancellare la CMOS subito dopo aver aggiornato il BIOS. Se è necessario cancellare la CMOS una volta completato l'aggiornamento del BIOS, è necessario riavviare prima il sistema, e poi spegnerlo prima di procedere alla cancellazione della CMOS.

Italiano

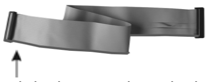
1.4 Connettori

> I connettori NON sono jumpers. NON COLLOCARE i ponticelli sui connettori. Installando dei cappucci a ponticello sui connettori si causeranno danni permanenti alla scheda madre!

Connettori		**Descrizione dei connettori**

Connettore del Floppy disk
(33-pin FLOPPY1)
(vedi p.2 item 21)

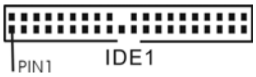




Lato del Pin1 con la striscia rossa

Nota: Assicurarsi che il lato del cavo con la striscia rossa sia inserito nel lato Pin1 del connettore.

Connettore IDE primario (blu)
(39-pin IDE1, vedi p.2 Nr. 8)



Connettore blu alla schedamadre

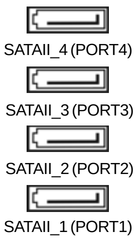


Connettore nero all'hard disk drive

Cavo ATA 66/100/133 a 80 Pin

Nota: Fate riferimento alle istruzioni del produttore del dispositivo IDE per maggiori dettagli.

Connettori Serial ATAII
(SATAII_1 (PORT1): vedi p.2 Nr. 14)
(SATAII_2 (PORT2): vedi p.2 Nr. 13)
(SATAII_3 (PORT3): vedi p.2 Nr. 12)
(SATAII_4 (PORT4): vedi p.2 Nr. 11)



Questi quattro connettori Serial ATA (SATAII) supportano le periferiche di archiviazione HD SATA o SATAII per le funzioni di archiviazione interna. ATAII (SATAII) supportano cavi SATAII per dispositivi di memoria interni. L'interfaccia SATAII attuale permette velocità di trasferimento dati fino a 3.0 Gb/s.

Cavi dati Serial ATA (SATA)
(Opzionale)

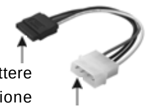


Una o altra estremità del cavo di dati SATA può essere collegata al disco rigido SATA / SATAII o al connettore di SATAII su questa cartolina base.

Italiano

Cavo d'alimentazione Serial ATA (SATA)

(Opzionale)

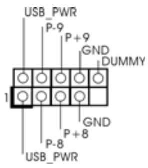


Collegare l'estremità nera de cavo di alimentazione SATA al connettore di alimentazione del drive. Poi connettete l'estremità bianca del cavo di alimentazione SATA al connettore power dell'alimentatore.

Collettore USB 2.0

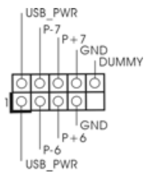
(9-pin USB8_9)

(vedi p.2 No. 16)



(9-pin USB6_7)

(vedi p.2 No. 15)

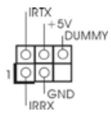


Oltre alle sei porte USB 2.0 predefinite nel pannello I/O, la scheda madre dispone di due intestazioni USB 2.0. Ciascuna intestazione USB 2.0 supporta due porte USB 2.0.

Collettore modulo infrarossi

(5-pin IR1)

(vedi p.2 Nr. 30)

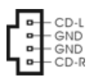


Questo collettore supporta moduli ad infrarossi optional per la trasmissione e la ricezione senza fili.

Connettori audio interni

(4-pin CD1)

(CD1: vedi p.2 item 29)



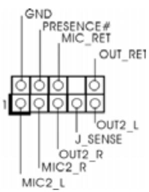
CD1

Permettono di ricevere input stereo audio da fonti di suono come CD-ROM, DVD -ROM,TV tuner, o schede MPEG.

Connettore audio sul pannello frontale

(9-pin HD_AUDIO1)

(vedi p.2 item 22)



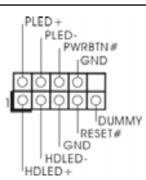
È un'interfaccia per il cavo del pannello audio. Che consente connessione facile e controllo dei dispositivi audio.

Italiano

1. La caratteristica HDA (High Definition Audio) supporta il rilevamento dei connettori, però il pannello dei cavi sul telaio deve supportare la funzione HDA (High Definition Audio) per far sì che questa operi in modo corretto. Attenersi alle istruzioni del nostro manuale e del manuale del telaio per installare il sistema.
2. Se si utilizza un pannello audio AC’97, installarlo nell’intestazione audio del pannello anteriore, come indicato di seguito:
   A. Collegare Mic_IN (MIC) a MIC2_L.
   B. Collegare Audio_R (RIN) a OUT2_R e Audio_L (LIN) ad OUT2_L.
   C. Collegare Ground (GND) a Ground (GND).
   D. MIC_RET e OUT_RET sono solo per il pannello audio HD. Non è necessario collegarli per il pannello audio AC’97.
   E. Entrare nel programma di impostazione BIOS. Entrare su Impostazioni avanzate, quindi selezionare Configurazione chipset. Impostare l’opzione Comando pannello anteriore da [Auto] a [Attivato].
   F. Entrare nel sistema di Windows. Fare clic sull’icona situata nell’angolo inferiore destro della barra delle applicazioni per entrare su Realtek HD Audio Manager.
   Per Windows® XP / XP 64-bit OS:
   Fare clic su “Audio I/O”, selezionare “Impostazioni connettore” , scegliere “Disattiva rilevazione presa pannello anteriore” e salvare la modifica facendo clic su “OK”.
   Per Windows® Vista™ / Vista™ 64-bit OS:
   Cliccare sull‘icona in alto a destra “Folder” (“Cartella”)  , selezionare “Disable front panel jack detection” “Disabilitare individuazione presa pannello frontale”) e cliccare “OK” per memorizzare.
   G. Per attivare il microfono anteriore.
   Per il sistema operativo Windows® XP / XP 64-bit:
   Selezionare “Microfono anteriore” come dispositivo predefinito per la registrazione. Per ascoltare la propria voce tramite il microfono anteriore, deselezionare l’icona “Muto” in “Microfono anteriore” di “Riproduzione”.
   Per il sistema operative Windows® Vista™ / Vista™ 64-bit:
   Andare alla scheda “Microfono anteriore” nel pannello di controllo d i Realtek. Fare clic su “Imposta dispositivo predefinito” per impostare il microfono anteriore come dispositivo predefinito per la registrazione.

Italiano

Connettore del panello frontale
(9-pin PANEL1)
(vedi p.2 item 17)

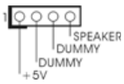


Questo connettore accoglie diverse funzioni del pannello frontale.

Collettore casse telaio

(4-pin SPEAKER1)

(vedi p.2 item 19)

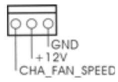


Collegare le casse del telaio a questo collettore.

Collettori Chassis ed alimentazione ventola

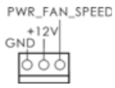
(3-pin CHA_FAN1)

(vedi p.2 Nr. 20)



(3-pin PWR_FAN1)

(vedi p.2 Nr. 28)

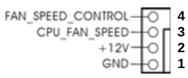


Collegare i cavi della ventola ai corrispondenti connettori facendo combaciare il cavo nero col pin di terra.

Connettore ventolina CPU

(4-pin CPU_FAN1)

(vedi p.2 item 31)



Collegare il cavo della ventolina CPU a questo connettore e far combaciare il filo nero al pin terra.

Sebbene la presente scheda madre disponga di un supporto per ventola CPU a 4 piedini (ventola silenziosa), la ventola CPU a 3 piedini è in grado di funzionare anche senza la funzione di controllo della velocità della ventola. Se si intende collegare la ventola CPU a 3 piedini al connettore della ventola CPU su questa scheda madre, collegarla ai piedini 1-3.

Piedini 1-3 collegati

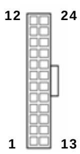


Installazione della ventola a 3 piedini

Collettore alimentazione ATX

(24-pin ATXPWR1)

(vedi p.2 item 7)



Collegare la sorgente d'alimentazione ATX a questo collettore.

Con questa scheda madre, c'è in dotazione un connettore elettrico ATX a 24 pin, ma può funzionare lo stesso se si adotta un alimentatore ATX a 20 pin. Per usare l'alimentatore ATX a 20 pin, collegare l'alimentatore con il Pin 1 e il Pin 13.



Installazione dell'alimentatore ATX a 20 pin

Connettore ATX 12V

(4-pin ATX12V1)

(vedi p.2 item 2)



È necessario collegare una alimentazione con spinotto da 12V ATX a questo connettore in modo che possa fornire energia sufficiente. In caso contrario l'unità non si avvia.

Italiano

2. Informazioni sul BIOS

La Flash Memory sulla scheda madre contiene le Setup Utility. Quando si avvia il computer, premi <F2> durante il Power-On-Self-Test (POST) della Setup utility del BIOS; altrimenti, POST continua con i suoi test di routine. Per entrare il BIOS Setup dopo il POST, riavvia il sistema premendo <Ctl> + <Alt> + <Delete>, o premi il tasto di reset sullo chassis del sistema. El BIOS Setup Utility es diseñádo "user-friendly". Es un programa guido al menu, es decir, puede enrollarse a sus varios su-menues y elegir las opciones predeterminadas. Per informazioni più dettagliate circa il Setup del BIOS, fare riferimento al Manuale dell'Utente (PDF file) contenuto nel cd di supporto.

3. Software di supporto e informazioni su CD

Questa scheda madre supporta vari sistemi operativi Microsoft® Windows®: XP / Centro multimediale XP / XP 64 bit / VistaTM / VistaTM 64-bit. Il CD di supporto a corredo della scheda madre contiene i driver e utilità necessari a potenziare le caratteristiche della scheda. Inserire il CD di supporto nel lettore CD-ROM. Se la funzione "AUTORUN" è attivata nel computer, apparirà automaticamente il Menù principale. Se il Menù principale non appare automaticamente, posizionarsi sul file ASSETUP.EXE nel CESTINO del CD di supporto e cliccare due volte per visualizzare i menù.

Italiano

1. Introducción

Gracias por su compra de ASRock ***M3A-GLAN*** placa madre, una placa de confianza producida bajo el control de calidad estricto y persistente. La placa madre provee realización excelente con un diseño robusto conforme al compromiso de calidad y resistencia de ASRock.

Esta Guía rápida de instalación contiene una introducción a la placa base y una guía de instalación paso a paso. Puede encontrar una información más detallada sobre la placa base en el manual de usuario incluido en el CD de soporte.

> Porque las especificaciones de la placa madre y el software de BIOS podrían ser actualizados, el contenido de este manual puede ser cambiado sin aviso. En caso de cualquier modificación de este manual, la versión actualizada estará disponible en el website de ASRock sin previo aviso. También encontrará las listas de las últimas tarjetas VGA y CPU soportadas en la página web de ASRock.
> Website de ASRock http://www.asrock.com
> Si necesita asistencia técnica en relación con esta placa base, visite nuestra página web con el número de modelo específico de su placa.
> www.asrock.com/support/index.asp

1.1 Contenido de la caja

Placa base ASRock ***M3A-GLAN***
(Factor forma ATX: 30,5 cm x 19,8 cm, 12,0” x 7,8”)
Guía de instalación rápida de ASRock ***M3A-GLAN***
CD de soporte de ASRock ***M3A-GLAN***
Una cinta de datos IDE de conducción 80 Ultra ATA 66/100/133
Un Cable de Datos Serial ATA (SATA) (Opcional)
Un cable serie ATA (SATA) de alimentación de disco duro (Opcional)
Una protección I/O

1.2 Especificación

Plataforma	- Factor forma ATX: 30,5 cm x 19,8 cm, 12,0” x 7,8”
Procesador	- Soporte para procesadores con zócalo AM2+ y AM2: AMD Phenom™ FX, Phenom, Athlon 64 FX, Athlon 64 X2 Dual-Core, Athlon X2 Dual-Core, Athlon 64 y procesador Sempron - Compatibilidad con procesadores con AM3: procesador AMD Phenom™ II X4 / X3 / X2 y Athlon II X4 / X3 / X2 - Compatible con AMD LIVE!™ - Con soporte para tecnología Cool ‘n’ Quiet™ de AMD - FSB 1000 MHz (2.0 GT/s) - Admite tecnología de aumento de velocidad liberada (vea **ATENCIÓN 1**) - Soporta Tecnología de Hiper-Transporte
Chipset	- North Bridge: AMD 480X CrossFire™ - South Bridge: AMD SB600
Memoria	- Soporte de Tecnología de Memoria de Doble Canal (ver **ATENCIÓN 2**) - 4 x DDR2 DIMM slots - Apoya DDR2 1066/800/667/533 non-ECC, memoria de un-buffered (vea **ATENCIÓN 3**) - Máxima capacidad de la memoria del sistema: 16GB (vea **ATENCIÓN 4**)
Ranuras de Expansión	- 1 x ranuras PCI Express x16 - 2 x ranura PCI Express x1 - 3 x ranuras PCI
Audio	- Sonido HD de Nivel Superior 5.1 Canales Windows® Vista™ (Códec de sonido ALC662)
LAN	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111DL - Soporta Wake-On-LAN
Entrada/Salida de Panel Trasero	ASRock HD 6CH I/O - 1 x puerto de ratón PS/2 - 1 x puerto de teclado PS/2 - 1 x puerto serial: COM1 - 1 x Puerto paralelo: soporta ECP/EPP - 6 x puertos USB 2.0 predeterminados - 1 x Puerto LAN RJ-45 con LED (LED de ACCIÓN/ENLACE y LED de VELOCIDAD) - Audio Jack: Line In / Line Out / Micrófono

Conectores	- 4 x conexiones SATAII, admiten una velocidad de transferencia de datos de hasta 3,0Gb/s, soporta RAID (RAID 0, RAID 1 y RAID 10), NCQ, AHCI y "Conexión en caliente" (vea **ATENCIÓN 5**) - 1 x ATA133 conexiones IDE (admite hasta 2 dispositivos IDE) - 1 x puerto Floppy - 1 x Cabezal de Módulo Infrarrojos - Conector de ventilador de CPU / chasis / alimentacion - 24-pin cabezal de alimentación ATX - 4-pin conector de ATX 12V power - Conector de Audio Interno - Conector de audio de panel frontal - 2 x Cabezal USB 2.0 (admite 4 puertos USB 2.0 adicionales) (vea **ATENCIÓN 6**)
BIOS	- 4Mb AMI BIOS - AMI legal BIOS - Soporta "Plug and Play" - ACPI 1.1 compliance wake up events - Soporta "jumper free setup" - Soporta SMBIOS 2.3.1 - Múltiple ajuste de CPU Voltage - Compatible con Smart BIOS
CD de soport	- Controladores, Utilerías, Software de Anti Virus (Versión de prueba)
Característica Única	- Sintonizador de ASRock OC (vea **ATENCIÓN 7**) - Administrador de energía inteligente (vea **ATENCIÓN 8**) - Instant Boot - ASRock Instant Flash (vea **ATENCIÓN 9**) - Amplificador Híbrido: - Stepless control de frecuencia de CPU (vea **ATENCIÓN 10**) - ASRock U-COP (vea **ATENCIÓN 11**) - Protección de Falla de Inicio (B.F.G..) - ASRock AM2 Boost: tecnología patentada de ASRock que permite mejorar el rendimiento de la memoria hasta en un 12,5% (vea **ATENCIÓN 12**)
Monitor Hardware	- Sensibilidad a la temperatura del procesador - Sensibilidad a la temperatura de la placa madre - Taquimetros de los ventiladores del procesador y del CPU / chasis / alimentacion - Ventilador silencioso para procesador

Español

	- Monitor de Voltaje: +12V, +5V, +3.3V, Vcore
OS	- En conformidad con Microsoft® Windows® XP / XP Media Center / XP 64 bits / Vista™ / Vista™ 64 bits
Certificaciones	- FCC, CE, WHQL

* Para más información sobre los productos, por favor visite nuestro sitio web: http://www.asrock.com

ADVERTENCIA

Tenga en cuenta que hay un cierto riesgo implícito en las operaciones de aumento de la velocidad del reloj, incluido el ajuste del BIOS, aplicando la tecnología de aumento de velocidad liberada o utilizando las herramientas de aumento de velocidad de otros fabricantes. El aumento de la velocidad puede afectar a la estabilidad del sistema e, incluso, dañar los componentes y dispositivos del sistema. Esta operación se debe realizar bajo su propia responsabilidad y Ud. debe asumir los costos. No asumimos ninguna responsabilidad por los posibles daños causados por el aumento de la velocidad del reloj.

ATENCIÓN!

1. Esta placa base admite la tecnología de aumento de velocidad liberada. Por favor lea "Tecnología de Forzado de Reloj (Overclocking) no relacionado" en la página 20 para obtener detalles.
2. Esta placa base soporta Tecnología de Memoria de Doble Canal. Antes de implementar la Tecnología de Memoria de Doble Canal, asegúrese de leer la guía de instalación de módulos de memoria en la página 11 para su correcta instalación.
3. Que la velocidad de memoria de 1066 MHz se admita o no se admita, depende de la configuración AM2+ Procesador que adopte. Si desea adoptar el módulo de memoria DDR2 1066 en esta placa base, consulte la lista de compatibilidad de memorias en nuestro sitio Web para obtener los módulos de memoria compatibles.
   Sitio Web de ASRock: http://www.asrock.com
4. Debido a las limitaciones del sistema, el tamaño real de la memoria debe ser inferior a 4GB para que el sistema pueda funcionar bajo Windows® XP y Windows® Vista™. Para equipos con Windows® XP 64-bit y Windows® Vista™ 64-bit con CPU de 64-bit, no existe dicha limitación.
5. Antes de instalar un disco duro SATAII en el conector SATAII, consulte la sección "Guía de instalación de discos duros SATAII" en la página 22 del "Manual de usuario" que se incluye en el CD de soporte para configurar su disco duro SATAII en modo SATAII. También puede conectar un disco duro SATA directamente al conector SATAII.
6. Power Management para USB 2.0 funciona bien bajo Microsoft® Windows® Vista™ 64 bits / Vista™ / XP 64 bits / XP SP1; SP2.
7. Es una herramienta de overclocking de ASRock de usuario-fácil que le permite a supervisar su sistema por la función de monitor de hardware y overclock sus dispositivos de hardware para obtener el mejor funcionamiento del sistema bajo el entorno de Windows®. Por favor

Español

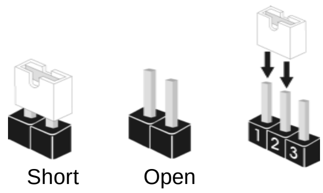
visite nuestro sitio web para los procedimientos de operación de Sintonizador de ASRock OC.
Sitio web de ASRock: http://www.asrock.com

8. Gracias a su avanzado hardware de propietario y diseño de software, Intelligent Energy Saver (Economizador de energía inteligente) es una revolucionaria tecnología que ofrece un ahorro de energía sin igual. El regulador de voltaje permite reducir el número de fases de salida para mejorar la eficiencia cuando los núcleos de la CPU están inactivos. En otras palabras, permite ofrecer un ahorro excepcional de energía y mejorar la eficiencia energética sin sacrificar el rendimiento del equipo. Para utilizar la función Intelligent Energy Saver (Economizador de energía inteligente) , active la opción Cool ‘n’ Quiet en la configuración de BIOS. Visite nuestro sitio web para conocer los procedimientos de uso de Intelligent Energy Saver (Economizador de energía inteligente).
Sitio web de ASRock: http://www.asrock.com
9. ASRock Instant Flash es una utilidad de programación del BIOS que se encuentra almacenada en la memoria Flash ROM. Esta sencilla herramienta de actualización de BIOS le permitirá actualizar el BIOS del sistema sin necesidad de acceder a ningún sistema operativo, como MS-DOS o Windows®. Gracias a esta utilidad, sólo necesitará pulsar <F6> durante la fase POST o pulsar <F2> para acceder al menú de configuración del BIOS y a la utilidad ASRock Instant Flash. Ejecute esta herramienta y guarde el archivo correspondiente al sistema BIOS nuevo en su unidad flash USB, unidad de disco flexible o disco duro para poder actualizar el BIOS con sólo pulsar un par de botones, sin necesidad de preparar un disco flexible adicional ni utilizar complicadas utilidades de programación. Recuerde que la unidad flash USB o disco duro utilizado debe disponer del sistema de archivos FAT32/16/12.
10. Aunque esta placa base ofrece un control complete, no es recomendable forzar la velocidad. Las frecuencias de bus de la CPU distintas a las recomendadas pueden causar inestabilidad en el sistema o dañar la CPU.
11. Cuando la temperatura de CPU está sobre-elevada, el sistema va a apagarse automaticamente. Antes de reanudar el sistema, compruebe si el ventilador de la CPU de la placa base funciona apropiadamente y desconecte el cable de alimentación, a continuación, vuelva a conectarlo. Para mejorar la disipación de calor, acuérdese de aplicar thermal grease entre el procesador y el disipador de calor cuando usted instala el sistema de PC.
12. Esta placa base admite la tecnología ASRock AM2 Boost para aumento de la velocidad del reloj. Si habilita esta función en la configuración del BIOS, el rendimiento de la memoria mejorará hasta en un 12,5%, pero seguirá dependiendo del procesador AM2 que adopte. Al activar esta función, la velocidad del reloj de referencia del conjunto de chips y del procesador aumentará. No obstante, no podemos garantizar la estabilidad del sistema para todas las configuraciones de procesador y memoria DRAM. Si el sistema se comporta de forma inestable

después de habilitar la función AM2 Boost, es posible que dicha función no se pueda aplicar a aquél. Si lo desea, puede deshabilitar la función para mantener la estabilidad del sistema.

1.3 Setup de Jumpers

La ilustración muestra como los jumpers son configurados. Cuando haya un jumper-cap sobre los pins, se dice gue el jumper está “Short”. No habiendo jumper cap sobre los pins, el jumper está “Open”. La ilustración muesta un jumper de 3 pins cuyo pin 1 y pin 2 están “Short”.



Jumper	Setting	
PS2_USB_PW1 (vea p.2, No. 1)		Ponga en cortocircuito pin 2, pin 3 para habilitar +5VSB (standby) para PS/2 o USB wake up events.

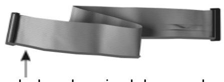
Atención: Para elegir +5VSB, se necesita corriente mas que 2 Amp proveida por la fuente de electricidad.

Limpiar CMOS (CLRCMOS1, jumper de 3 pins) (ver p.2, No. 24)	 Valor predeterminado	Restablecimiento de la CMOS

Atención: CLRCMOS1 permite que Usted limpie los datos en CMOS. Los datos en CMOS incluyen informaciones de la configuración del sistema, tales como la contraseña del sistema, fecha, tiempo, y parámetros de la configuración del sistema. Para limpiar y reconfigurar los parametros del sistema a la configuración de la fábrica, por favor apague el computador y desconecte el cable de la fuente de electricidad, utilice una cubierta de jumper para aislar las agujas pin2 y pin3 en CLRCMOS1 durante 5 segundos. Por favor acuérdase de quitar el jumper cap después de limpiar el COMS. Por favor acuérdase de quitar el jumper cap después de limpiar el COMS. Si necesita borrar la CMOS cuando acabe de finalizar la actualización de la BIOS, debe arrancar primero el sistema y, a continuación, apagarlo antes de realizar la acción de borrado de CMOS.

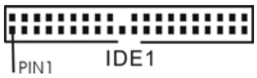
1.4 Conectores

> Los conectores no son jumpers. Por favor no ponga jumper caps sobre los conectores. El colocar cubiertas de puentes sobre los conectores provocará un daño permanente en la placa base.

Conector	Figure	Descripción
Conector de disquetera (33-pin FLOPPY1) (vea p.2, No. 21)		 la banda roja debe quedar en el mismo lado que el contacto 1

Atención: Asegúrese que la banda roja del cable queda situado en el mismo lado que el contacto 1 de la conexión.

IDE conector primario (azul)
(39-pin IDE1, vea p.2, No. 8)



Conector azul a placa madre

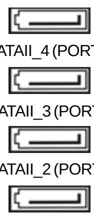


Conector negro a aparato IDE

Cable ATA 66/100/133 de conducción 80

Atención: Consulte las instrucciones del distribuidor del dispositivo IDE para conocer los detalles.

Conexiones de serie ATAII
(SATAII_1 (PORT1): vea p.2, No. 14)
(SATAII_2 (PORT2): vea p.2, No. 13)
(SATAII_3 (PORT3): vea p.2, No. 12)
(SATAII_4 (PORT4): vea p.2, No. 11)



Estos cuatro conectores de la Serie ATA (SATAII) soportan HDDs SATA o SATAII para dispositivos de almacenamiento interno. La interfaz SATAII actual permite una velocidad de transferencia de 3.0 Gb/s.

Cable de datos de serie ATA (SATA)
(Opcional)



Cualquier extremo del cable de los datos de SATA puede ser conectado con el disco duro de SATA / SATAII o el conectador de SATAII en esta placa base.

Español

Cable de alimentación serie ATA (SATA)
(Opcional)

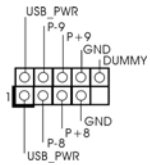


Connettere all’ailmentazione dei dischi SATA

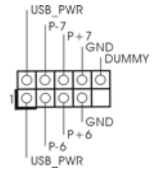
Connettere al gruppo di alimentazione

Conecte el extremo negro del de cable de SATA al conector de energía de la unidad. A continuación, conecte el extremo blanco del cable de alimentación SATA a la conexión de alimentación de la fuente de alimentación.

Cabezal USB 2.0
(9-pin USB8_9)
(ver p.2, No. 16)

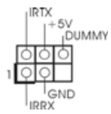


(9-pin USB6_7)
(ver p.2, No. 15)



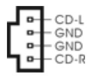
Además de seises puertos USB 2.0 predeterminados en el panel de E/S, hay dos bases de conexiones USB 2.0 en esta placa base. Cada una de estas bases de conexiones admite dos puertos USB 2.0.

Cabezal de Módulo Infrarrojos
(5-pin IR1)
(vea p.2, N. 30)



Este cabezal soporta un módulo infrarrojos de transmisión y recepción wireless opcional.

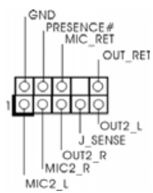
Conector de Audio Interno
(4-pin CD1)
(CD1: vea p.2, No. 29)



CD1

Permite recepción de input audio de fuente sónica como CD-ROM, DVD-ROM, TV tuner, o tarjeta MPEG.

Conector de audio de panel frontal
(9-pin HD_AUDIO1)
(vea p.2, No. 22)



Este es una interface para cable de audio de panel frontal que permite conexión y control conveniente de apparatos de Audio.

1. El Audio de Alta Definición soporta la detección de conector, pero el cable de panel en el chasis debe soportar HDA para operar correctamente. Por favor, siga las instrucciones en nuestro manual y en el manual de chasis para instalar su sistema.

Español

2. Si utiliza el panel de sonido AC'97, instálelo en la cabecera de sonido del panel frontal de la siguiente manera:
   A. Conecte Mic_IN (MIC) a MIC2_L.
   B. Conecte Audio_R (RIN) a OUT2_R y Audio_L (LIN) en OUT2_L.
   C. Conecte Ground (GND) a Ground (GND).
   D. MIC_RET y OUT_RET son sólo para el panel de sonido HD. No necesitará conectarlos al panel de sonido AC'97.
   E. Entre en la Utilidad de configuración del BIOS Entre en Configuración avanzada y, a continuación, seleccione Configuración del conjunto de chips. En el panel de control frontal cambie la opción [Automático] a [Habilitado].
   F. Entre en el sistema Windows. Haga clic en el icono de la barra de tareas

   situada en la parte inferior derecha para entrar en el Administrador de audio HD Realtek.

   Para Windows® XP / XP 64-bit OS:

   Haga clic en "E/S de audio", seleccione "Configuración de conectores"  , elija "Deshabilitar la detección del conector del panel frontal" y guarde el cambio haciendo clic en "Aceptar".

   Para Windows® Vista™ / Vista™ 64-bit OS:

   Haga el clic el icono de la "Carpeta" de derecho-superior  , eliga "Inhabilitable la detección del gato del panel delantero" y ahorre el cambio por chascando "OK".
   G. Para activar el micrófono frontal.

   Para el sistema operativo Windows® XP / XP de 64 bits:

   Seleccione "Micrófono frontal" como el dispositivo de grabación predeterminado. Si desea escuchar su propia voz a través del micrófono frontal, anule la selección del icono «Activar silencio» en "Micrófono frontal" de la sección "Reproducción".

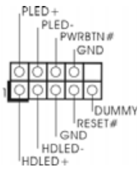
   Para el sistema operativo Windows® Vista™ / Vista™ de 64 bits:

   Vaya a la ficha «Micrófono central» en el panel Control de Realtek. Haga clic en «Establecer dispositivo predeterminado» para convertir el micrófono central en el dispositivo de grabación predeterminado.

Conector del Panel del sistema

(9-pin PANEL1)

(vea p.2, No. 17)

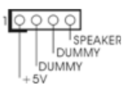


Este conector acomoda varias funciones de panel frontal del systema.

Cabezal del altavoz del chasis

(4-pin SPEAKER1)

(vea p.2, No. 19)



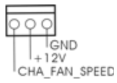
Conecte el altavoz del chasis a su cabezal.

Español

Conectores de ventilador de chasis, y alimentación

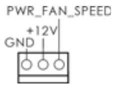
(3-pin CHA_FAN1)

(vea p.2, N. 20)



(3-pin PWR_FAN1)

(vea p.2, N. 28)

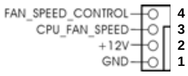


Por favor, conecte los cables del ventilador a los conectores de ventilador, haciendo coincidir el cable negro con la patilla de masa.

Conector del ventilador de la CPU

(4-pin CPU_FAN1)

(vea p.2, No. 31)

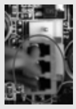


Conecte el cable del ventilador de la CPU a este conector y haga coincidir el cable negro con el conector de tierra.



Aunque esta placa base proporciona compatibilidad para un ventilador (silencioso) de procesador de 4 contactos, el ventilador de procesador de 3 contactos seguirá funcionando correctamente incluso sin la función de control de velocidad del ventilador. Si pretende enchufar el ventilador de procesador de 3 contactos en el conector del ventilador de procesador de esta placa base, conéctelo al contacto 1-3.

Contacto 1-3 conectado

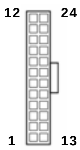


Instalación del ventilador de 3 contactos

Cabezal de alimentación ATX

(24-pin ATXPWR1)

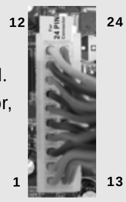
(vea p.2, No. 7)



Conecte la fuente de alimentación ATX a su cabezal.



A pesar de que esta placa base incluye in conector de alimentación ATX de 24 pins, ésta puede funcionar incluso si utiliza una fuente de alimentación ATX de 20 pins tradicional. Para usar una fuente de alimentación ATX de 20 pins, por favor, conecte su fuente de alimentación usando los Pins 1 y 13.



Instalación de una Fuente de Alimentación ATX de 20 Pins

Conector de ATX 12V power

(4-pin ATX12V1)

(vea p.2, No. 2)



Tenga en cuenta que es necesario conectar este conector a una toma de corriente con el enchufe ATX 12V, de modo que proporcione suficiente electricidad. De lo contrario no se podrá encender.

te los cables del
conectores de
ndo coincidir el
la patilla de

2. BIOS Información

El Flash Memory de la placa madre deposita SETUP Utility. Durante el Power-Up (POST) apriete <F2> para entrar en la BIOS. Sí usted no oprime ninguna tecla, el POST continúa con sus rutinas de prueba. Si usted desea entrar en la BIOS después del POST, por favor reinicie el sistema apretando <Ctl> + <Alt> + <Borrar>, o apretando el botón Reset en el panel del ordenador. El programa SETUP esta diseñado a ser lo mas fácil posible. Es un programa guiado al menu, es decir, puede enrollarse a sus varios sub-menues y elegir las opciones predeterminadas. Para información detallada sobre como configurar la BIOS, por favor refiérase al Manual del Usuario (archivo PDF) contenido en el CD.

3.Información de Software Support CD

Esta placa-base soporta diversos tipos de sistema operativo Windows®: XP / XP Media Center / XP 64 bits / Vista™ / Vista™ 64 bits El CD de instalación que acompaña la placa-base trae todos los drivers y programas utilitarios para instalar y configurar la placa-base. Para iniciar la instalación, ponga el CD en el lector de CD y se desplegará el Menú Principal automáticamente si «AUTORUN» está habilitado en su computadora. Si el Menú Principal no aparece automáticamente, localice y doble-pulse en el archivo ASSETUP.EXE para iniciar la instalación.

o
os

12 24

1 13

Español

1. 제품소개

ASRock 의 *M3A-GLAN* 메인 보드를 구매하여 주신것에 대하여 감사 드립니다. 이 메인보드는 엄격한 품질관리 하에 생산되어진 신뢰성 있는 메인보드 입니다. 이 제품은 고 품격 디자인과 함께 ASRock 의 우수한 품질과 최고의 안정성을 자랑하고 있습니다. 이 빠른 설치 안내서에는 마더보드에 대한 설명과 단계별 설치 방법이 실려 있습니다. 마더보드에 대한 보다 자세한 내용은 지원 CD 의 사용 설명서에서 확인할 수 있습니다.

> 메인보드의 사양이나 바이오스가 업 데이트 되기 때문에 이 사용자 설명서의 내용은 예고 없이 변경되거나 바뀔 수가 있습니다. 만일을 생각해서 이 사용자 설명서의 어떤 변경이 있으면 ASRock 의 웹 사이트에서 언제든지 업 데이트를 하실 수 있습니다. 웹사이트에서 최신 VGA 카드와 CPU 지원 목록을 확인할 수 있습니다. ASRock 의 웹사이트 주소는 http://www.asrock.com 입니다.
> 본 머더보드와 관련하여 기술 지원이 필요한 경우 당사 웹 사이트를 방문하여 사용 중인 모델에 대한 특정 정보를 얻으십시오.
> www.asrock.com/support/index.asp

1.1 패키지 내용

ASRock *M3A-GLAN* 마더보드
(ATX 폼 팩터: 12.0" X 7.8", 30.5 X 19.8 cm)
ASRock *M3A-GLAN* 퀵 설치 가이드
ASRock *M3A-GLAN* 지원 CD
80도체 울트라 ATA 66/100/133 IDE 리본 케이블 1개
시리얼 ATA(SATA) 데이터 케이블 1개(선택 사양)
시리얼 ATA(SATA) HDD 전원 케이블 1개(선택 사양)
I/O 차폐 1개

한국어

1.2 설명서

플랫폼	- ATX 폼 팩터: 12.0" X 7.8", 30.5 X 19.8 cm
CPU	- 지원되는 Socket AM2+/AM2 프로세서: AMD Phenom™ FX / Phenom /Athlon 64 FX /Athlon 64 X2 Dual-Core / Athlon X2 Dual-Core /Athlon 64 /Sempron 프로세서 - AM3 프로세서에 대한 지원: AMD Phenom™ II X4 / X3 / X2 및 Athlon II X4 / X3 / X2 프로세서 - AMD LIVE!™ 작동 가능 - AMD 의 Cool 'n' Quiet™ 기술 지원 - FSB 1000 MHz(2.0 GT/s) - 언타이드 오버클러킹(Untied Overclocking) 기술 지원 (주의 1 참조) - 하이퍼 트랜스포트 기술 지원
칩셋	- 노스브릿지: AMD 480X CrossFire™ - 사우스 브릿지: AMD SB600
메모리	- 듀얼 채널 메모리 기술 지원 (주의 2 참조) - DDR2 DIMM 슬롯 4 개 - DDR2 1066/800/667/533 비 -ECC, 언버퍼드 메모리를 지원 (주의 3 참조) - 최대 시스템 메모리 용량: 16GB (주의 4 참조)
확장 슬롯	- 1 개의 PCI Express x16 슬롯 - 2 개의 PCI Express x1 슬롯 - 3 개의 PCI 슬롯
오디오	- 5.1CH Windows® Vista™ Premium 레벨 HD 오디오 (ALC662 오디오 코덱)
랜	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111DL - 웨이크 - 온 - 랜 지원
후면판 I/O	ASRock HD 6CH I/O - 1 개 PS/2 마우스 포트 - 1 개 PS/2 키보드 포트 - 1 개의 COM1 - 1 개의 병렬 포트:ECP/EPP 지원오 디오 잭 - 6 개디폴트 USB 2.0 포트 - 1 개 LED(ACT/LINK LED 및 SPEED LED)가 있는 RJ-45 LAN 포트 - 라인 출력 / 라인 입력 / 마이크 폰 + 게임 포트

온보드 헤더 및 커넥터	- 4 개의 Serial ATAII 3.0Gb/s 커넥터,. RAID (RAID 0, RAID 1 및 RAID 10) 기능 지원, NCQ, AHCI 및 "핫플러그" 기 능지원 (**주의 5 참조**) - ATA133 IDE 커넥터 1 개 (최고 2 개의 IDE 장치 지원) - 플로피 포트 1 개 - 적외선 모듈 헤더 1 개 - CPU/ 섀시 / 전원 팬 커넥터 - 24 핀 ATX 전원 헤더 - 4 핀 ATX 12V 파워 콘넥터 - 내부 오디오 콘넥터 - 전면부 오디오 콘넥터 - USB 2.0 헤더 2 개 (4 개의 추가 USB 2.0 포트를 지원하는 헤더 2 개) (**주의 6 참조**)
BIOS	- 4Mb AMI BIOS - AMI에 따른 바이오스 - "플러그 앤 플레이" 지원 - ACPI 1.1 웨이크-업 이벤트와의 호환 - 점퍼 프리 지원 - 점퍼 프리 지원 ; SMBIOS 2.3.1 지원 - CPU 전압 멀티 조절 - Smart BIOS 지원
지원 CD	- 드라이버, 유틸리티, 안티 바이러스 소프트웨어 (트라이얼 버전)
특점및 특성	- ASRock OC 튜너 (**주의 7 참조**) - Intelligent Energy Saver (**주의 8 참조**) - Instant Boot - ASRock Instant Flash (**주의 9 참조**) - 하이드브리 부스터: - CPU 주파수의 단계적인 조절 (**주의 10 참조**) - ASRock U-COP (**주의 11 참조**) - B.F.G..(Boot Failure Guard) - AM2 Boost: 메모리 성능을 최대 12.5% 까지 끌어올리는 ASRock 특허 기술 (**주의 12 참조**)
하드웨어 모니터	- CPU 온도 감지 - 마더보드 온도 감지 - CPU/ 섀시 / 전원 팬 회전 속도계:샤시(케이스) 팬 회전 속도계 - CPU 소음팬 - 전압 감시 기능 : +12V,+5V,+3.3V,Vcore
OS	- 마이크로 소프트 Windows® XP/XP 미디어 센터 /XP 64 비트 / Vista™/Vista™ 64-bit 와 호환
인증서	- FCC, CE, WHQL

한국어

* 상세한 제품정보는 당사의 웹사이트를 방문할수있습니다. http://www.asrock.com

경 고

오버클로킹에는 BIOS 설정을 조정하거나 Untied Overclocking Technology 를 적용하거나타업체의 오버클로킹 도구를 사용하는 것을 포함하여 어느 정도의 위험이 따른다는 것을 유념하십시오. 오버클로킹은 시스템 안정성에 영향을 주거나 심지어 시스템의 구성 요소와 장치에 손상을 입힐지도 모릅니다. 오버클로킹은 사용자 스스로 위험과 비용을 감수하고 해야 합니다. 당사는 오버클로킹에 의해 발생할 수 있는 손상에 대해서 책임이 없습니다.

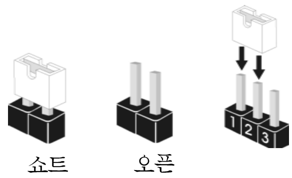
주의!

1. 이 마더보드는 언타이드 오버클러킹 기술을 지원합니다. 자세한 내용은 20페이지의 "언타이드 오버클러킹 기술"을 읽으십시오.
2. 이 마더보드는 듀얼 채널 메모리 기술을 지원합니다. 듀얼 채널 메모리 기술을구현하기 전에 올바른 설치를 위하여 11쪽에 있는 메모리 모듈 설치 안내를읽으십시오.
3. 1066MHz 메모리 속도의 지원 여부는 채택된 AM2+ CPU에 따라 결정됩니다. 이 마더보드에 DDR2 1066 메모리 모듈을 채택하려는 경우 당사 웹사이트의 메모리 지원 목록에서 호환 가능한 메모리 모듈을 검색하십시오.
   ASRock 웹사이트 http://www.asrock.com
4. 운영 체제 한계 때문에 Windows® XP 및 Windows® Vista™ 에서 시스템 용도로 예약된 실제 메모리 크기는 4 GB 이하일 수 있습니다. 64 비트 CPU 와 Windows® XP 64 비트 및 Windows® Vista™ 64 비트의 경우 그런 한계가 없습니다.
5. SATAII 하드 디스크를 SATAII 커넥터에 연결하기 전에, 지원 CD 의 "User Manual"(사용 설명서) 22 페이지에 나와 있는 "SATAII Hard Disk Setup Guide"(SATAII 하드 디스크 설치 설명서) 에 따라 SATAII 하드 디스크드라이브를 SATAII 모드로 조정하십시오. 또한 SATA 하드 디스크를SATAII 커넥터에 직접 연결할 수 있습니다.
6. 마이크로소프트 윈도우 Vista™ 64 비트/Vista™/XP 64 비트/XP SP1; SP2 상 에서 USB 2.0의구동을위한 전원 관리 모드가 정상적으로.
7. 이것은 사용하기 쉬운ASRock 오버클러킹 툴이며 당신으로하여금, 하드웨어 모니터 기능 으로 당신의 시스템을 감시하며 하드웨어 시설을 오버클러킹함으로서Windows® 환경속에서 가장 우수한 시스템 작업을 실현합니다. 당사의 웹사이트를 방문하여ASRock OC 튜너의 작업 절차를요해할수있습니다.
   ASRock 웹사이트: http://www.asrock.com

한국어

8. 자체 개발한 고급 하드웨어 및 소프트웨어 디자인을 특징을 하는 Intelligent Energy Saver (인텔리전트 에너지 세이버) 는 혁신적인 기술로서 절전 효과가 타제품에 비해 월등합니다. CPU 코어가 유휴 상태일 때 전압 조정기가 출력 위상의 수를 줄여 효율을 높여줍니다. 즉, 탁월한 절전 효과와 함께 컴퓨터의 성능을 떨어뜨리지 않으면서 전원 효율을 높일 수 있습니다. Intelligent Energy Saver (인텔리전트 에너지 세이버) 기능을 사용하려면, 먼저 BIOS 셋업에서 쿨앤콰이어트 옵션을 활성화하십시오. Intelligent Energy Saver (인텔리전트 에너지 세이버) 의 사용법은 당사의 웹 사이트를 참조하십시오. ASRock 웹 사이트: http://www.asrock.com
9. ASRock Instant Flash는 플래시ROM에 내장된 BIOS 유틸리티입니다. 이 편리한 BIOS 업데이트 툴을 사용하면 먼저 MS-DOS나 Windows® 같은 운영체제에 들어가지 않고도 시스템 BIOS를 업데이트할 수 있습니다. POST 중에 BIOS 셋업 메뉴에서 <F6> 키를 누르거나 <F2> 키를 누르면 이 유틸리티로 ASRock Instant Flash에 액세스할 수 있습니다.. 이제 이 툴을 시작하여 USB 플래시 드라이브, 플로피 디스크 또는 하드 드라이브에 새 BIOS 파일을 저장하면 플로피 디스켓이나 기타 복잡한 플래시 유틸리티를 추가로 준비하지 않고도 몇 번의 클릭만으로도 BIOS를 업데이트할 수 있습니다. USB 플래시 드라이브 또는 하드 드라이브는 FAT32/16/12 파일 시스템을 사용해야 합니다.
10. 본 마더보드는 직접 조절 기능을 제공하지만, 오버 클러킹을 하는 것은 권장되지 않습니다. 권장 CPU 버스 주파수가 아닌 주파수를 사용하면 시스템이 불안정해지거나 CPU가 손상될 수 있습니다.
11. 시스템을 다시 시작하기 전에 메인보드 위의 CPU 팬이 정상적으로 동작 또는 장착되어 있는지 확인하여 주십시오. 고온 방지를 위하여 PC 시스템을 설치할 때 CPU와 방열판 사이에 그리스를 발라 주셔야 합니다.
12. 이 마더보드는 AM2 Boost 오버클로킹 기술을 지원합니다. BIOS 설정에서이 기능을 사용으로 설정하는 경우, 메모리 성능을 12.5%까지 높일 수 있으나 효과는 채택한 AM2 CPU에 따라 다릅니다. 이 기능을 사용으로 설정하면 칩셋/CPU 기준 클록을 오버클로킹합니다. 그러나 모든 CPU/DRAM 구성에 대해 시스템 안정성을 보증할 수 없습니다. 기능을 사용으로 설정했을 때 시스템이 불안정한 경우, 이 기능이 현재 시스템에 적합치 않을 수 있습니다. 이 경우 이 기능을 사용 안함으로 설정하여 시스템의 안정성을 유지하는 것이 좋습니다.

1.3 점퍼 셋팅



그림은 점퍼를 어떻게 셋업 하는지를 보여줍니다.
점퍼 캡이 핀 위에 있을 때, 점퍼는 "쇼트"입니다.
점퍼 캡이 핀 위에 없을 때 점퍼는 "오픈"입니다.
그림은 3개의 핀 중 1-2번 핀이 "쇼트"임을 보여주는 것이며, 점퍼 캡이 이 두 핀 위에 있음을 보여주는 것입니다.

점퍼	세팅	
PS2_USB_PW1 (2페이지, 1번 항목 참조)	 	PS/2 또는 USB를 깨어나게 하기 위해서는 2 번과 3 번 핀을 "쇼트" 하여야 합니다.

참고: +5VSB 선택할 경우 2암페어 정도 높은 전류 공급을 요구합니다.

CMOS 초기화
(CLRCMOS1, 3 핀 점퍼)
(2페이지, 24번 항목 참조)



기본 설정 CMOS 삭제

참고: CLRCMOS1은 CMOS의 데이터를 삭제할 수 있게 합니다. CMOS의 데이터는 시스템 암호, 날자, 시간 및 시스템 설정 매개 변수와 같은 시스템 설정 정보를 포함합니다. 시스템 매개 변수를 삭제하고 기본 설정으로 초기화하려면 컴퓨터를 끄고 전원 코드를 뽑은 후 점퍼 캡을 사용하여 CLRCMOS1의 2번과 3번 핀을 5초간 단락시키십시오. CMOS를 초기화 한 뒤, 반드시 점퍼 캡을 제거하여야 합니다. 바이오스 업데이트를마친 후 CMOS를 삭제해야하는 경우 CMOS 삭제 동작 전에 시스템을 먼저부팅했다가 종료해야 합니다.

한국어

1.4 온보드 헤더 및 커넥터

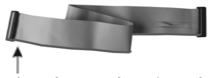


주의!
이 콘넥터는 점퍼가 아닙니다. 이 콘넥터 위에 점퍼 캡을 사용하지 마세요. 커넥터에 점퍼 캡을 설치하면 마더보드가 영구적으로 손상됩니다!

콘넥터	그림	설명

FDD 콘넥터
(33 핀 FLOPPY1)
(2 페이지, 21 번 항목 참조)

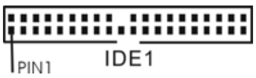




빨간색 줄무늬 쪽을 1 번 핀에

참고: 케이블의 빨간색 줄무늬가 있는 쪽을 커넥터의 1번 핀에 맞추어 연결하십시오.

IDE 콘넥터 1 (파란색)
(39 핀 IDE1, 2 페이지, 8 번 항목 참조)



파란색은 메인보드에 연결합니다

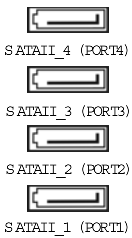


검정색은 IDE 디바이스에 연결합니다

80 도체 ATA 66/100/133 케이블

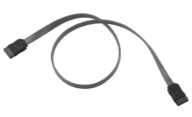
참고: 자세한 사항은 IDE 장치 벤더가 제공하는 사용 설명서를참조하십시오.

시리얼 ATAII 커넥터
(SATAII_1 (PORT1):
2 페이지, 14 번 항목 참조)
(SATAII_2 (PORT2):
2 페이지, 13 번 항목 참조)
(SATAII_3 (PORT3):
2 페이지, 12 번 항목 참조)
(SATAII_4 (PORT4):
2 페이지, 11 번 항목 참조)



4 개의 직렬 ATA (SATAII) 커넥터가 내부 저장 장치용 SATA 또는 SATAII HDD를 지원합니다. 커넥터가 내부기억 장치용 SATAII 케이블을지원합니다. 현재의 SATAII 인터페이스는 최고 3.0 Gb/s의데이터 전송 속도를지원합니다.

시리얼 ATA(SATA)
데이터 케이블
(선택 사양)



SATA 데이터 케이블의 임의적인 측을 마더보드의 SATA / SATAII하드 디스크 혹은 SATAII 커넥터에 연결합니다.

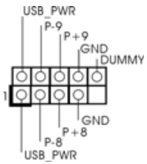
한국어

시리얼 ATA(SATA)
전원 케이블
(선택 사양)

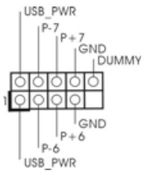


SATA 전원 케이블의 검은색 끝부분을 드라이브의 전원 커넥터에 연결하십시오. 그 다음에 SATA 전원 케이블의 흰색 끝을 전원 공급장치의 전원 커넥터에 연결합니다.

USB 2.0 헤더
(9핀 USB8_9)
(2페이지, 16번 항목 참조)

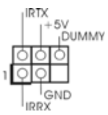


(9핀 USB6_7)
(2페이지, 15번 항목 참조)



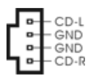
본 머더보드에는 I/O 패널에 있는 6 개의 기본 USB 2.0 포트 외에도 USB 2.0 헤더가 2 개 있습니다. 각각의 USB 2.0 헤더는 2 개의 USB 2.0 포트를 지원할 수 있습니다.

적외선 모듈 헤더
(5핀 IR1)
(2페이지, 30번 항목 참조)



이 헤더는 선택품목인 무선 적외선 송수신 모듈을 지원합니다.

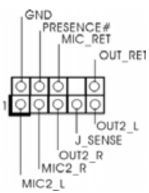
내부 오디오 콘넥터
(4핀 CD1)
(CD1: 2페이지,29번 항목 참조)



CD1

이 콘넥터는 CD-ROM, DVD-ROM, TV 튜너, 또는 MPEG 카드의 사운드 소스로부터 스테레오 입력을 받기 위한 것입니다.

전면부 오디오 콘넥터
(9핀 HD_AUDIO1)
(2페이지, 22번 항목 참조)



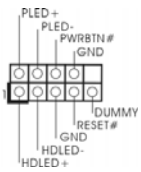
이 콘넥터는 오디오 장치를 편리하게 조절하고 연결할 수 있는 전면 오디오 인터페이스 입니다.

1. High Definition Audio(고음질 오디오)는 잭 센스 기능을 지원하나, 제대로작동하려 면 섀시의 패널 와이어가 HAD를 지원해야 합니다. 이 설명서 및 섀시 설명서의지침 을 따라 시스템을 설치하십시오.
2. AC' 97 오디오 패널을 사용하는 경우, 이를 아래와 같이 프런트 패널 의오디오헤 더에 설치하십시 오.
   A. Mic_IN (MIC)을 MIC2_L에 연결합니다.
   B. Audio_R (RIN)을 OUT2_R 에 연결하고, Audio_L (LIN)을 OUT2_L에 연결합 니다.

한국어

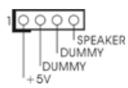
C. Ground (GND)을 Ground (GND) 에 연결합니다.
D. MIC_RET 및 OUT_RET는 HD 오디오 패널 전용입니다. 이들을 AC' 97 오디오 패널에 연결 하지 않아도 됩니다.
E. BIOS 설정 유틸리티를 선택합니다. 고급 설정을 선택한 다음, 칩셋구성을 선택합니다. 프론트 패널 제어를 [자동]에서 [사용]으로 설정합니다.
F. Windows® 시스템을 시작합니다. 우측 하단의 작업 표시줄에 있는 아이콘을 클릭하여 Realtek HD Audio Manager를 시작합니다.
Windows® XP / XP 64-bit 작업시스템에 대하여:
"오디오 입출력" 을 클릭하고, "커넥터 설정"  을 선택하고, "프론트패널 잭 감지 사용 안함" 을 선택한 다음, "확인" 을 클릭하여 변경 내용을저장합니다.
Windows® Vista™ / Vista™ 64-bit 작업시스템에 대하여:
우상부의 "폴더"  아이콘을 클릭하여 "프론트 면판삽입구 검측기능을 잠금" 을 선택한후 "확인" 을 클릭하여 변경을 저장합니다.
G. 앞면 마이크 활성화
Windows® XP / XP 64비트 OS의 경우:
"앞면 마이크"를 기본 녹음 장치로 선택하십시오.
앞면 마이크를 통해 자기 목소리를 듣고 싶으면 "재생" 부분의 "앞면 마이크"에서 "음소거" 아이콘을 선택하십시오.
Windows® Vista™ / Vista™ 64비트 OS의 경우:
Realtek 제어판의 "앞면 마이크" 탭으로 이동합니다. "기본 장치 설정"을 클릭하여 앞면 마이크를 기본 녹음 장치로 설정합니다.

시스템 콘넥터
(9핀 PANEL1)
(2페이지, 17번 항목 참조)



이 콘넥터는 시스템 전면 패널 기능을 지원하기 위한 것입니다.

새시 스피커 헤더
(4 핀 SPEAKER 1)
(2페이지, 19번 항목 참조)

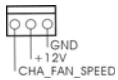


새시 스피커를 이 헤더에 연결하십시오.

한국어

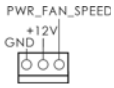
섀시 및 전원 팬 커넥터

(3핀 CHA_FAN1)
(2페이지, 20번 항목 참조)



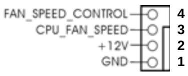
팬 케이블을 팬 커넥터에 연결하고 접지 핀에는 검은색 전선을 연결하십시오.

(3 핀 PWR_FAN1)
(2페이지, 28번 항목 참조)



CPU 팬 커넥터

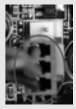
(4 핀 CPU_FAN1)
(2페이지, 31번 항목 참조)



CPU 팬 케이블을 이 커넥터에 연결하고 흑색 선을 접지 핀에 맞추십시오.

본 머더보드가 4 핀 CPU 팬(저소음 팬) 지원을 제공하기는 하지만 팬 속도 제어 기능없이도 3 핀 CPU 팬을 성공적으로 작동할 수 있습니다. 본 머더보드의 CPU 팬 커넥터에 3 핀 CPU 팬을 연결하려면 1-3 번 핀에 연결하십시오.

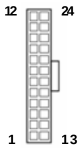
1-3 번 핀에 연결됨



3 핀 팬 설치

ATX 전원 헤더

(24핀 ATXPWR1)
(2 페이지, 7번 항목 참조)



ATX 전원 공급기를 이 헤더에 연결하십시오.

이 마더보드는 24 핀 ATX 전원 커넥터를 제공하지만, 종래의 20핀 ATX 전원 공급장치를 사용해도 작동이 가능합니다. 20핀 ATX 전원 공급장치를 사용하려면, Pin 1과 Pin 13으로 전원 공급장치를 연결하십시오.



20 핀 ATX 전원 공급장치 설치

ATX 12V 파워 콘넥터

(4핀 ATX12V1)
(2페이지, 2번 항목 참조)



ATX 12V 플러그가 달린 전원공급장치를 이 커넥터에 연결해야 충분한 전력을 공급할 수 있습니다. 그러지 않을 경우 전원을 켤 수 없습니다.

2. 시스템 바이오스 정보

메인보드의 플래쉬 메모리에는 바이오스 셋업 유틸리티가 저장되어 있습니다. 컴퓨터를 사용하실 때, “자가진단 테스트”(POST) 가 실시되는 동안 <F2>키를 눌러 바이오스 셋업으로 들어가세요; 만일 그렇게 하지 않으면 POST는 테스트 루틴을 계속하여 실행할 것입니다. 만일 POST 이후 바이오스 셋업을 하기 원하신다면,<Ctl>+<Alt>+<Delete>키를 누르거나, 또는 시스템 본체의 리셋 버튼을 눌러 시스템을 재 시작하여 주시기 바랍니다. 바이오스 셋업 프로그램은 사용하기 편하도록 디자인되어 있습니다. 각 항목은 다양한 서브 메뉴 표가 올라오며 미리 정해진 값 중에서 선택할 수 있도록 되어 있습니다. 바이오스 셋업에 대한 보다 상세한 정보를 원하신다면 보조 CD안의 포함된 사용자 매뉴얼(PDF 파일)을 따라 주시기 바랍니다.

3. 소프트웨어 지원 CD 정보

이 메인보드는 여러 가지 마이크로소프트 윈도우 운영 체계를 지원합니다 : XP/XP 미디어 센터/XP 64 비트/Vista™/Vista™ 64-bit. 메인보드에 필요한 드라이버와 사용자 편의를 위해 제공되는 보조 CD는 메인보드 의 기능을 향상시켜 줄 것입니다. 보조 CD를 사용하여 시작하시려면, CD-ROM 드라이브에 CD를 넣어주시기바랍니다. 만일 고객님의 컴퓨터가 “AUTORUN” 이 가능하다면 자동으로 메인 메뉴를 모니터에 디스플레이 시켜 줄 것입니다. 만일 자동으로 메인 메뉴가 나타나지 않는다면, 보조 CD의 디스플레이 메뉴 안에 있는 BIN 폴더
ASSETUP.EXE 파일을 더블 클릭하여 주시기 바랍니다.
(D: \BIN \ASSETUP.EXE, D:는 CD-ROM 드라이브)

한국어

1. 主板简介

谢谢你采用了华擎 *M3A-GLAN* 主板，本主板由华擎严格制造，质量可靠，稳定性好，能够获得卓越的性能。此快速安装指南包括主板介绍和分步安装向导。您可以查看支持光盘里的用户手册了解更详细的资料。

由于主板规格和 BIOS 软件将不断升级，本手册之相关内容变更恕不另行通知。请留意华擎网站上公布的升级版本。你也可以在华擎网站找到最新的显卡和 CPU 支持表。
华擎网址：http://www.asrock.com
如果您需要与此主板有关的技术支持，请参观我们的网站以了解您使用机种的规格信息。
www.asrock.com/support/index.asp

1.1 包装盒内物品

华擎 *M3A780GXH/128M* 主板
（ATX 规格：12.0 英寸 X 7.8 英寸，30.5 厘米 X 19.8 厘米）
华擎 *M3A780GXH/128M* 快速安装指南
华擎 *M3A780GXH/128M* 支持光盘
一条 80-conductor Ultra ATA 66/100/133 IDE 排线
一条 Serial ATA(SATA) 数据线（选配）
一条 Serial ATA(SATA) 硬盘电源线（选配）
一块 I/O 挡板

简体中文

1.2 主板规格

架构	- ATX 规格：12.0 英寸 X 7.8 英寸，30.5 厘米 X 19.8 厘米
处理器	- 支持 Socket AM2+/AM2 处理器:AMD Phenom™ FX/ Phenom/Athlon 64 FX/Athlon 64 X2 Dual-Core/ Athlon X2 Dual-Core/Athlon 64/Sempron 处理器) - 支持 AM3 处理器：AMD Phenom™ II X4 / X3 / X2 和 Athlon II X4 / X3 / X2 处理器 - AMD LIVE!™ Ready - 支持 AMD Cool 'n' Quiet™ 冷静技术 - 支持 FSB 1000 MHz (2.0 GT/s) - 支持异步超频技术（详见***警告*** 1 ） - 支持 Hyper-Transport 技术
芯片组	- 北桥：AMD 480X CrossFire™ - 南桥：AMD SB600
系统内存	- 支持双通道内存技术（见警告 2） - 配备 4 个 DDR2 DIMM 插槽 - 支持 DDR2 1066/800/667/533 non-ECC、un-buffered 内存（见警告 3 ） - 系统最高支持 16GB 容量（见警告 4）
扩展插槽	- 1 x PCI Express x16 插槽 - 2 x PCI Express x1 插槽 - 3 x PCI 插槽
音效	- 5.1 声道 Windows® Vista™ Premium 级别高保真音频 (ALC662 音频编解码器)
板载 LAN 功能	- PCIE x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111DL - 支持网路唤醒（Wake-On-LAN）
Rear Panel I/O（后面板输入/输出接口）	ASRock HD 6CH I/O 界面 - 1 个 PS/2 鼠标接口 - 1 个 PS/2 键盘接口 - 1 个串行接口 - 1 个并行接口(支持 ECP/EPP) - 6 个可直接使用的 USB 2.0 接口 - 1 个 RJ-45 局域网接口与 LED 指示灯(ACT/LINK LED 和 SPEED LED) - 高保真音频插孔：音频输入 / 前置喇叭 / 麦克风

简体中文

连接头	- 4 x SATAII 3.0Gb/s 连接头，支持RAID (RAID 0, RAID 1和RAID 10)，NCQ，AHCI和“热插拔”功能（详见*警告5*） - 1 x ATA133 IDE插座（最高支持2个IDE驱动器） - 1 x 软驱接口 - 1 x 红外线模块接头 - CPU/机箱/电源风扇接头 - 24针ATX电源接头 - 4针12V电源接头 - 内置音频接头 - 前置音频面板接头 - 2 x USB 2.0接口（可支持4个额外的USB 2.0接口）（详见*警告6*）
BIOS	- 4Mb AMI BIOS - 采用AMI BIOS - 支持即插即用（Plug and Play,PnP） - ACPI 1.1 电源管理 - 支持唤醒功能 - 支持jumperfree免跳线模式 - 支持SMBIOS 2.3.1 - CPU电压多功能调节器 - 支持智能BIOS
支持光盘	- 驱动程序，工具软件，杀毒软件（测试版本）
独家功能	- 华擎超频调节器（详见*警告7*） - 智能节能器(Intelligent Energy Saver)(见警告8) - 即时开机功能 - 华擎Instant Flash（见警告9） - Hybrid Booster(安心超频技术)： - 支持CPU无级频率调控（见警告10） - ASRock U-COP（见警告11） - Boot Failure Guard (B.F.G.,启动失败恢复技术) - ASRock AM2 Boost: 华擎专利技术，提供内存性能12.5%（见警告12）
硬件监控器	- CPU温度侦测 - 主板温度侦测 - CPU/机箱/电源风扇转速计 - CPU静音风扇 - 电压范围：+12V，+5V，+3.3V，核心电压
操作系统	- Microsoft® Windows® XP/XP多媒体中心/XP 64位元/Vista™/Vista™ 64位元适用于此主板
认证	- FCC，CE，WHQL

* 请参阅华擎网站了解详细的产品信息：http://www.asrock.com

简体中文

警 告
请了解超频具有不可避免的风险，这些超频包括调节 BIOS 设置、运用异步超频技术或使用第三方超频工具。超频可能会影响您的系统稳定性，甚至会导致系统组件和设备的损坏。这种风险和代价须由您自己承担，我们对超频可能导致的损坏不承担责任。

警告！

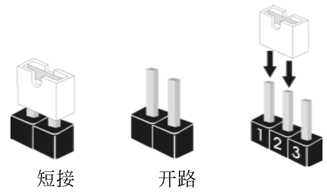
1. 这款主板支持异步超频技术。请阅读第 20 页的”Untied Overclocking Technology”(自由超频技术)了解详情。
2. 这款主板支持双通道内存技术。在您实现双通道内存技术之前，为能正确安装，请确认您已经阅读了第 11 页的内存模组安装指南。
3. 1066MHz 内存频率是否支持在于您使用的 AM2+ CPU 。如果您想在这款主板上使用 DDR2 1066 内存条，请查阅我们网站的内存支持列表了解兼容的内存。华擎网站 http://www.asrock.com
4. 由于操作系统的限制，在 Windows® XP 和 Windows® Vista™ 下，供系统使用的实际内存容量可能小于 4GB。对於 Windows® XP 64 位元和 Windows® Vista™ 64 位元搭配 64 位元 CPU 来说， 不会存在这样的限制。
5. 在将 SATAII 硬盘连接到 SATAII 接口之前，请阅读 CD 光盘中的“User Manual”(用户手册， 英文版)第 22 页的“SATAII Hard Disk Setup Guide”(SATAII 硬盘安装指南) 调整您的 SATAII 硬盘驱动器为 SATAII 模式。您也可以直接将 SATA 硬盘连接到 SATAII 接口。
6. USB2.0 电源管理在 Windows® Vista™ 64 位元 /Vista™/XP 64 位元 / XP SP1 或 SP2 系统下可正常工作。
7. 这是一款具有友好使用介面的华擎超频工具，让您通过硬件监控功能监控您的系统，帮助您在 Windows® 环境下对硬件运行超频以获得最佳的系统性能。请访问我们的网站了解华擎超频调节器的使用方法。
   华擎网站: http://www.asrock.com
8. 智能节能器(Intelligent Energy Saver)采用先进的软硬件专利设计，这项革新技术带来极佳的节能效果。当 CPU 核心闲置时，电压调节器可以简小输出电压的相数，有助于提升能源效率。换句话说，它可以在不牺牲性能的前提下，让系统更省电，并提高能源效率。为了使用智能节能器(Intelligent Energy Saver)的功能，请在 BIOS 的高级设置里启用 Cool ‘n’ Quiet 选项。请访问我们的网站了解智能节能器(Intelligent Energy Saver)的使用方法。华擎网站: http://www.asrock.com
9. 华擎 Instant Flash 是一个内建于 Flash ROM 的 BIOS 更新工具程序。这个方便的 BIOS 更新工具可让您无需进入操作系统(如 MS-DOS 或 Windows®)即可进行 BIOS 的更新。在系统开机自检过程中按下<F6>键或在 BIOS 设置菜单中按下<F2>键即可进入华擎 Instant Flash 工具程序。启动这一程序後，只需把新的 BIOS 文件保存在 U 盘、软盘或硬盘中，轻松点击鼠标就能完成 BIOS 的更新，而不再需要准备额外的软盘或其他复杂的更新程序。请注意:U 盘或硬盘必须使用 FAT32/64 文件系统。

10. 尽管本主板提供无级频率调控，但不推荐用户超频使用。不同于标准 CPU 总线频率的非标准频率可能会使系统不稳定，甚至会损害 CPU 和主板。主板的处理器主频由跳线装置决定。
11. 当检测到 CPU 过热问题时，系统会自动关机。在您重新启动系统之前，请检查主板上的 CPU 风扇是否正常运转并拔出电源线，然后再将它插回。为了提高散热性，在安装 PC 系统时请在 CPU 和散热器之间涂一层导热胶。
12. 这款主板支持 ASRock AM2 Boost 超频技术。如果您在 BIOS 设置程序里启用该功能， 内存性能将提升 12.5%， 但是实际效果还与您所使用的 AM2 CPU 有关。启用这项功能将对芯片组 /CPU 进行超频。但是， 我们无法保证所有 CPU/ 内存配置的系统稳定性。如果您启用 AM2 Boost 功能之后， 系统变的不稳定， 表明它可能不适合您的系统。您可以选择关闭该功能， 以保证系统的稳定性。

简体中文

1.3 跳线设置

插图所示的就是设置跳线的方法。当跳线帽放置在针脚上时，这个跳线就是“短接”。如果针脚上没有放置跳线帽， 这个跳线就是“开路”。插图显示了一个3 针脚的跳线，当跳线帽放置在针脚 1 和针脚 2 之间时就是“短接”。



接脚		设定
PS2_USB_PW1 (见第 2 页第 1 项)		短接 pin2 和 pin3，就可以设置+5VSB(待机)，使 PS/2 或 USB 能唤醒系统。

注意： 选择+5VSB，电源必须能提供+2 AMP 或更高的待机电流。

清除 CMOS
(CLRCMOS1，3 针脚跳线)
(见第 2 页第 24 项)

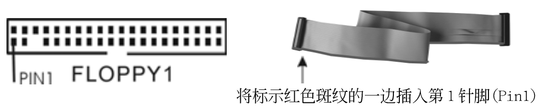


注意： CLRCMOS1 允许您清除 CMOS 里的资料。在 CMOS 里的资料包括系统设置资讯，例如系统密码，日期，时间及系统设置参数。为了清除并重置系统参数到默认设置，请关闭电脑并拔掉电源线，然後用跳线帽短接 CLRCMOS1 上的 pin2 和 pin3 五秒钟。如果您需要再完成 BIOS 刷新时清除 CMOS，您必须首先启动系统，然後在您进行 CMOS 清除操作之前关闭系统。

1.4 板载接头和接口

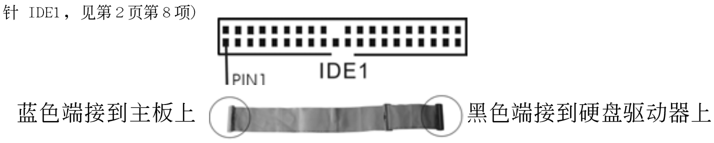
板载接头和接口不是跳线。切勿将跳线帽放置在这些接头和接口上。将跳线帽放置在接头和接口上将会导致主板的永久性损坏!

软驱接头
(33 针 FLOPPY1)
(见第 2 页第 21 项)



注意： 请确保数据线标红色斑纹的一边插入连接器第 1 针脚(Pin1)的位置。

主 IDE 连接头(蓝色)
(39 针 IDE1，见第 2 页第 8 项)



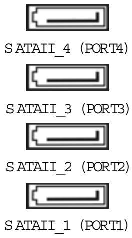
80 针 的 ATA 66/100/133 排线

注意： 请查阅您的 IDE 驱动器供应商提供的说明书了解详细资料。

简体中文

Serial ATAII 接口

(SATAII_1 (PORT1):
见第 2 页第 14 项)
(SATAII_2 (PORT2):
见第 2 页第 13 项)
(SATAII_3:(PORT3)
见第 2 页第 12 项)
(SATAII_4:(PORT4)
见第 2 页第 11 项)



这里有四组Serial ATAII (SATAII)接口支持Serial (SATA)数据线作为内部储存设置。目前SATAII 界面理论上可提供高达3.0Gb/s 的数据传输速率。

Serial ATA (SATA) 数据线
(选配)



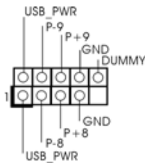
SATA 数据线的任意一端均可连接SATA/SATAII 硬盘或者主板上的SATAII 接口。

Serial ATA (SATA) 电源线
(选配)



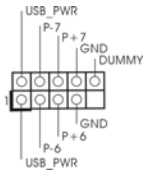
请将SATA 电源线黑色的一端连接到SATA 驱动器的电源接口。然后将SATA 电源线白色的一端连接到电源适配器的电源接口。

USB 2.0 扩展接头
(9 针 USB8_9)
(见第 2 页第 16 项)

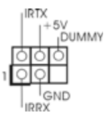


除了位於I/O 面板的六个默认USB 2.0 接口之外，这款主板有两组USB 2.0 接针。这组USB 2.0 接针可以支持两个USB 2.0 接口。

(9 针 USB6_7)
(见第 2 页第 15 项)

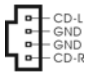


红外线模块接头
(5 针 IR1)
(见第 2 页第 30 项)



这个接头支持一个选配的无线发送和接受红外线的模块。

内置的音频接头
(4 针 CD1)
(见第 2 页第 29 项)

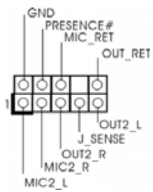


CD1

可以通过CD-ROM， DVD-ROM，TV 调谐器或MPEG 卡接收音频输入。

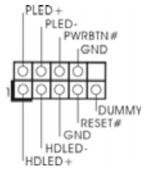
简体中文

前置音频面板接头　　可以方便连接音频设备。
(9 针 HD_AUDIO1)
(见第 2 页第 22 项)



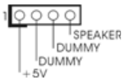
1. 高保真音频(High Definition Audio, HDA)支持智能音频接口检测功能(Jack Sensing),但是机箱面板的连线必须支持 HDA 才能正常使用。请按我们提供的手册和机箱手册上的使用说明安装您的系统。
2. 如果您使用 AC’97 音频面板,请按照下面的步骤将它安装到前面板音频接针:
   - A. 将 Mic_IN(MIC)连接到 MIC2_L。
   - B. 将 Audio_R(RIN)连接到 OUT2_R,将 Audio_L(LIN)连接到 OUT2_L。
   - C. 将 Ground(GND)连接到 Ground(GND)。
   - D. MIC_RET 和 OUT_RET 仅用于 HD 音频面板。您不必将它们连接到 AC’97 音频面板。
   - E. 进入 BIOS 设置程序。进入 Advanced Settings(高级设置)并选择 Chipset Configuration(芯片组配置)。将 Front Panel Control(前面板控制)选项由 Auto(自动)设置为 Enabled(启用)。
   - F. 进入 Windows 系统。点击右下角任务栏上的图标进入 Realtek HD Audio Manager(Realtek 高保真音频管理器)。
     支持 Windows® XP/XP 64 位元操作系统:
     点击”Audio I/O”(音频输入/输出接口),点选”Connector Settings”(连接设置)  ,选择”Disable front panel jack detection”(关闭前面板插孔检测)并点击”OK”保存更改。
     支持 Windows® Vista™/Vista™ 64 位元操作系统:
     点击右上角的”Folder”(文件)图标  ,选择”Disable front panel jack detection”(关闭前面板插孔检测)并点击”OK”保存更改。
   - G. 启用前置麦克风。
     支持 Windows® XP/XP 64 位元操作系统:
     请选择”Front Mic”(前置麦克风)作为默认录音设备。
     如果您想通过前置麦克风聆听您的声音,请点击”Playback”(播放)部分”Front Mic”(前置麦克风)一项里的”Mute”(静音)图标。
     支持 Windows® Vista™/Vista™ 64 位元操作系统:
     进入 Realtek 控制面版的”Front Mic”(前置麦克风)选项卡。
     点击”Set Default Device”(设置默认设备)将前置麦克风设置为默认录音设备。

系统面板接头
(9针 PANEL1)
(见第2页第17项)



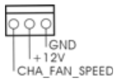
这个接头提供数个系统前面板功能。

机箱喇叭接头
(4针 SPEAKER1)
(见第2页第19项)

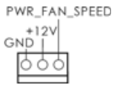


请将机箱喇叭连接到这个接头。

机箱，电源风扇接头
(3针 CHA_FAN1)
(见第2页第20项)

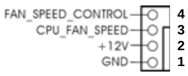


(3针 PWR_FAN1)
(见第2页第28项)



请将风扇连接线接到这个接头，并让黑线与接地的针脚相接。

CPU风扇接头
(4针 CPU_FAN1)
(见第2页第31项)



请将CPU风扇连接线接到这个接头，并让黑线与接地的针脚相接。

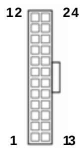


虽然此主板支持4-Pin CPU风扇(Quiet Fan,静音风扇),但是没有调速功能的3-Pin CPU风扇仍然可以在此主板上正常运行。如果您打算将3-Pin CPU风扇连接到此主板的CPU风扇接口,请将它连接到Pin 1-3。



Pin 1-3 连接
3-Pin 风扇的安装

ATX电源接头
(24针 ATXPWR1)
(见第2页7项)



请将ATX电源供应器连接到这个接头。



虽然此主板提供24-pin ATX电源接口,但是您仍然可以使用传统的20-pin ATX电源。为了使用20-pin ATX电源,请顺著Pin 1和Pin 3插上电源接头。



20-Pin ATX电源安装说明

简体中文

ATX 12V 电源接口 (4 针 ATX12V1) (见第 2 页第 2 项)		请注意，必需将带有 ATX 12V 插头的电源供应器连接到这个插座，这样就可以提供充足的电力。如果不这样做，就会导致供电故障。

2. BIOS 信息

主板上的 Flash Memory 芯片存储了 BIOS 设置程序。启动计算机，在机器开机自检(POST)的过程中按下<F2>键，就可进入 BIOS 设置程序，否则将继续进行开机自检之常规检验。如果须要在开机自检后进入 BIOS 设置程序，请按下 <Ctl> + <Alt> + <Delete>键重新启动计算机，或者按下系统面板上的重启按钮。功能设置程序储存有主板自身的和连接在其上的设备的缺省和设定的参数。这些信息用于在启动系统和系统运行需要时，测试和初始化元器件。有关 BIOS 设置的详细信息，请查阅随机支持光盘里的用户手册(PDF 文件)。

3. 支持光盘信息

本主板支持各种微软视窗操作系统：Microsoft® Windows® XP/XP 多媒体中心/XP 64 位元/Vista™/Vista™ 64 位元。主板附带的支持光盘包含各种有助于提高主板效能的必要驱动和实用程序。请将随机支持光盘放入光驱里，如果计算机的“自动运行”功能已启用，屏幕将会自动显示主菜单。如果主菜单不能自动显示，请查找支持光盘内 BIN 文件夹下的 ASSETUP.EXE 文件并双击它，即可调出主菜单。

安装

12 24

明 1 13

简体中文

电子信息产品污染控制标示

依据中国发布的「电子信息产品污染控制管理办法」及 SJ/T 11364-2006「电子信息产品污染控制标示要求」，电子信息产品应进行标示，藉以向消费者揭露产品中含有的有毒有害物质或元素不致发生外泄或突变从而对环境造成污染或对人身、财产造成严重损害的期限。依上述规定，您可于本产品之印刷电路板上看见图一之标示。图一中之数字为产品之环保使用期限。由此可知此主板之环保使用期限为 10 年。



图一

有毒有害物质或元素的名称及含量说明

若您欲了解此产品的有毒有害物质或元素的名称及含量说明，请参照以下表格及说明。

部件名称	有害物质或元素					
	铅(Pb)	镉(Cd)	汞(Hg)	六价铬(Cr(VI))	多溴联苯(PBB)	多溴二苯醚(PBDE)
印刷电路板及其电子组件	X	O	O	O	O	O
外部信号连接头及线材	X	O	O	O	O	O

O: 表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T 11363-2006 标准规定的限量要求以下。

X: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T 11363-2006 标准规定的限量要求，然该部件仍符合欧盟指令 2002/95/EC 的规范。

备注： 此产品所标示之环保使用年限，系指在一般正常使用状况下。

简体中文